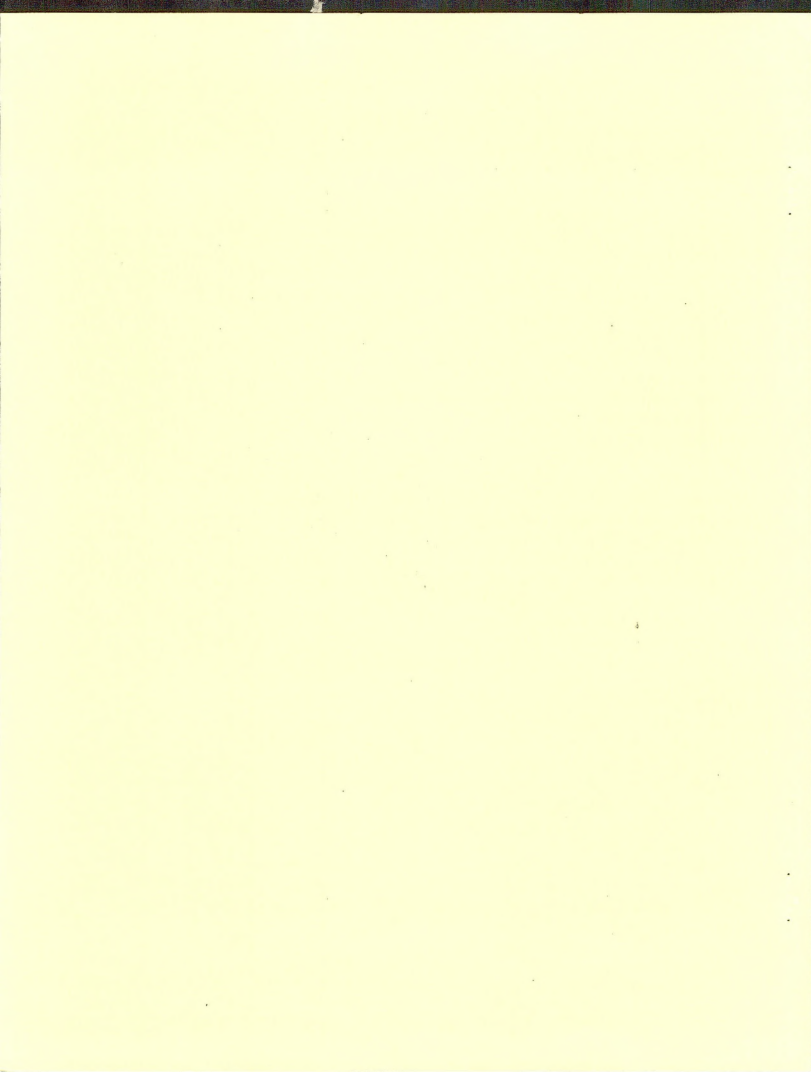


**AMPHIBIANS OF THE COEUR D'ALENE BASIN:
A SURVEY OF
BUREAU OF LAND MANAGEMENT LANDS**

By
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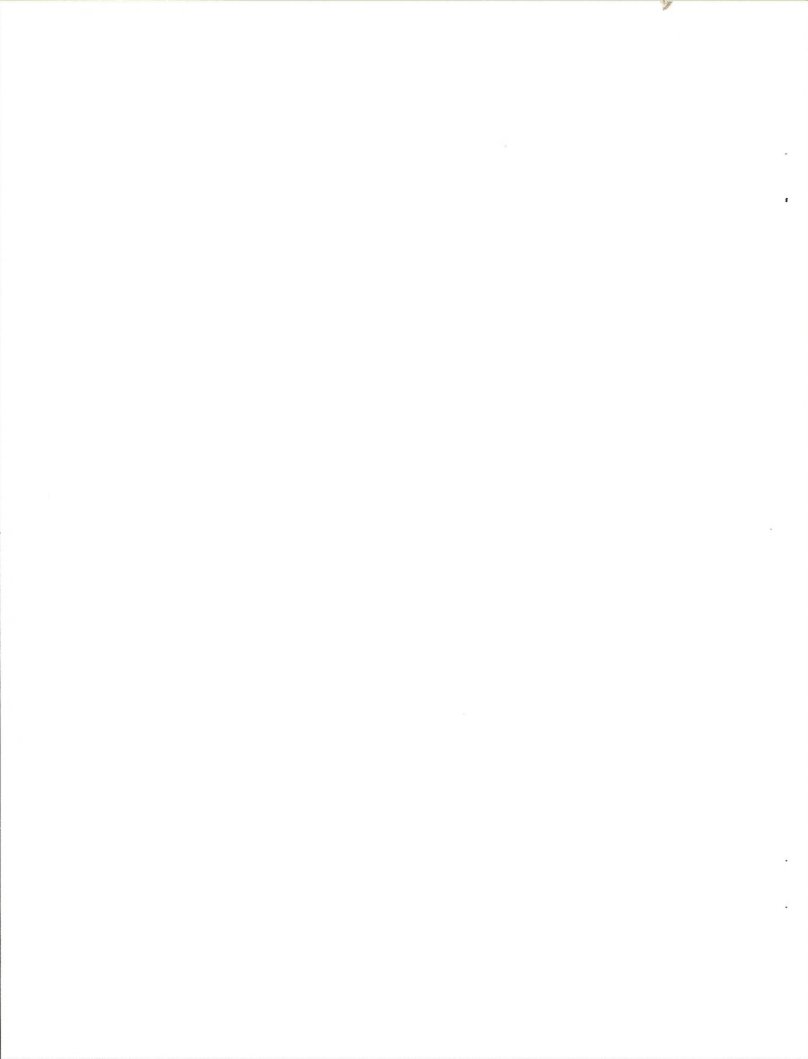
EXECUTIVE SUMMARY

Recent wide spread declines of some amphibian populations have resulted in an increased interest by resource managers in the status of the amphibian populations in their resource areas. When managers attempt to locate current, region specific data on amphibian populations, they often fail because of a lack of information. However, to make site specific management decisions for amphibians, managers must know what species occur in their area. The goal of this three year project (springs and summers of 1994, 1995, and 1996) was to determine the occurrence, distribution, and relative abundance of amphibians on Bureau of Land Management (BLM) Lands in the Coeur d'Alene Basin in northern Idaho. This final report presents and summarizes all data collected during this survey.

To achieve this goal, we conducted amphibian surveys at 14 ponds and 21 streams. We captured 9 of the 10 species of amphibians that potentially occur in the study area. Seven of the potential species are pond breeders, 2 are stream breeders, and 1 lays eggs on land. Therefore, we needed to use several techniques to achieve our goal.

The most widely distributed and abundant pond breeding amphibian was the Long-toed Salamander (*Ambystoma macrodactylum*), followed by the Spotted Frog (*Rana pretiosa*), Pacific Treefrog (*Pseudacris regilla*), Western Toad (*Bufo boreas*), and the Bullfrog (*Rana catesbeiana*). The most widely distributed and abundant stream dwelling amphibian was the Tailed Frog (*Ascaphus truei*) followed by the Idaho Giant Salamander (*Dicamptodon aterrimus*). We found Coeur d'Alene Salamanders (*Plethodon idahoensis*) to be widely dispersed and locally abundant in the study area.

We suggest three future projects that would improve our knowledge of the herpetofauna of the Coeur d'Alene Basin. First, a monitoring program for amphibians should be initiated. After three years of surveys, we probably have a reasonable representation of what amphibians occur in the Coeur d'Alene Basin. A monitoring program would allow resource personnel to observe trends in amphibian occurrence over time in the study area. The second suggested project is a survey of Northern Alligator Lizards (*Elgaria coerulea*). Third, if possible, adaptive management and monitoring of amphibian and reptile populations should be attempted on a case by case basis.



INTRODUCTION

Recent wide spread amphibian declines have caught the attention of many wildlife managers. They have become increasingly interested in the status of the amphibian populations in their resource areas. However, when managers attempt to locate current, region specific data on amphibian populations, they often fail because of a lack of information. In the Pacific Northwest, data are often lacking on the limits of species distributions, species ecology, and life history (Nussbaum et al. 1983). As the scale of interest is changed from regional (Pacific Northwest) to local (a county), data on the occurrence, distribution, and abundance of species become harder to locate. Unfortunately, these types of data are needed to evaluate the potential effects of local land-use practices on amphibian populations (Patla and Peterson 1996, Sullivan and Peterson 1996). Therefore, the first step in developing amphibian management plans should be surveys to determine occurrence, distribution, and relative abundance of the potential species.

The goal of this three year project (springs and summers of 1994, 1995, and 1996) was to determine the occurrence, distribution, and relative abundance of amphibians on Bureau of Land Management (BLM) Lands in northern Idaho (Fig. 1). To obtain this goal, we conducted pond and/or stream surveys for amphibians in four areas (1) along U. S. Interstate 90 from Wallace, Idaho to Coeur d'Alene, Idaho; (2) along Latour Creek south of Cataldo; (3) along Coeur d'Alene lake south of Coeur d'Alene; and (4) around Lake Pend Oreille. Ten species of amphibians potentially occur in the study area. Seven of the potential species are pond breeders, two are stream breeders, and one lays eggs on land. Therefore we used several techniques to achieve our goal. This final report presents and summarizes all data collected during this survey.

Study Area

We conducted this study in the Coeur d'Alene region of Northern Idaho (Fig. 2). The majority of the survey points occurred along U. S. Interstate 90 from Wallace, Idaho to Coeur d'Alene, Idaho. However, we also surveyed several sites outside of this corridor. We sampled two bays south of Coeur d'Alene along Lake Coeur d'Alene (Mica Bay and Loff's Bay), two lakes around Lake Pend Oreille (Gamlin and Antelope lakes), and several sites along Latour Creek south of Cataldo (Table 1). We selected a total of 14 ponds and 21 streams to survey.

Because of the fragmented and often disturbed nature of BLM land in the study area, we did not select survey sites randomly. Rather, we sampled any potential site on BLM land that we felt would contain amphibians including ponds, streams, bays, and seeps. To assist site selection, Scott Robinson (Wildlife Biologist, BLM, Coeur d'Alene District), suggested specific survey sites and provided 1:24000 scale U.S.G.S topographic maps with BLM land holdings outlined.

Site characteristics were variable. Sites ranged in elevation from approximately 900 m (3000 feet) along the Coeur d'Alene River to 1590 m (5300 feet) at Crystal Lake. The area along the Interstate 90 corridor has been highly disturbed by mining.

Sources of Information

We used several sources of information to generate a probable species list for the study area. We used the range maps in Stebbins (1985) to determine which species were likely to occur in the study area. We then checked this list against dot-distribution maps for the state (Nussbaum et al. 1983). Lastly, we consulted the Northern Intermountain Herpetological Database (Idaho Museum of Natural History) for museum records of potential amphibian (Table 2a) and reptile species (Table 2b).

Field Surveys

We selected 14 ponds and 21 streams to survey. Each site was visited at least twice each year. We attempted to temporally space the survey dates to optimize the chances of correctly detecting species occurrence at each site. One survey was conducted in the early spring to determine occurrence and breeding activity, and the second survey was conducted in the summer to determine species occurrence and reproductive success.

The methodology for conducting pond surveys was different than the methodology for stream surveys. In each case we followed the U.S. Fish and Wildlife Service protocol developed by Stephen Corn to collect data (Heyer et al. 1994). The protocol used for pond surveys was as follows. Timing ourselves, we walked the edge of the pond and looked for adult amphibians and egg masses. Because larvae are sometimes difficult to observe, we periodically used a dipnet to sample for larvae. We also turned any cover objects that were adjacent to the ponds. If possible, we walked across the pond to determine maximum depth. At each pond we measured pH (Oakton, pH Testr 2, accurate +/- 0.2, Forestry Suppliers, Inc. Jackson, MS), water conductivity (TDS Testr Oakton accurate +/- 2%, Forestry Suppliers, Inc. Jackson, MS) and water temperature (Quick Reading Miller-Weber Cloacal Thermometer, Queens, NY).

The protocol used to survey streams was as follows. We sampled three types of streams. Examples of the three types are as follows: (1) relatively large (approximately 1.5-3 m wide) with sparse canopy cover (Fig. 7), (2) smaller streams (<1.5 m wide) with complete canopy cover (Fig. 8), and (3) streams that have been "restored" (Fig. 9). We surveyed an approximately 100 m reach of each stream. We timed ourselves as we walked upstream turning rocks with a net held below. If a Tailed Frog (*Ascaphis truei*) or Idaho Giant Salamander (*Dicamptodon aterrimus*) was under the rock it would usually be washed into the net. At each stream we measured pH, water conductivity, and water temperature. We also found that, at low flow, some high gradient streams became a series of isolated pools. In this situation, we were able to walk up the reach of stream, peer into the pools, and see Tailed Frog tadpoles if they were present.

We also recorded observations of amphibians and reptile that were incidental to the survey sites. Incidental sites were areas that we located while driving to a specific survey

site. If we found appropriate habitat, we searched there. These sites were only visited once, and searching ended when one individual was found. Incidental reptile sightings were usually opportunistic observations at survey sites or were observed as "road-kill".

Mapping

Each site is represented on a scan of a 7.5 minute series topographic map. Facing each figure, is a summary table of the site location, site type, species breeding, and remarks. Several steps were required to prepare the maps of the survey sites for amphibians from the 1994, 1995, and 1996 field surveys (Figs. 11-33). While in the field, we marked the locations of survey sites on copies of USGS 7.5 minute series topographic maps. In the laboratory, we scanned in the appropriate portions of the topographic maps with a Hewlett-Packard ScanJet IICx scanner. The maps were scanned in as 256-color photo images at 180 dpi with normal sharpening, and saved as TIFF files. The TIFF files were then imported into Corel Draw 4.0 (Corel Corporation, Ottawa, Ontario, Canada). We added the site numbers and abbreviations for the amphibian and reptile species observed and then printed the maps with an Epson Color Stylus printer at 360 dpi. These maps give the most precise indications of our amphibian and reptile observation locations. We did not show the historical records on these maps because the accuracy of their locations is not as high as the 1994, 1995, and 1996 survey sites.

UTM coordinates for the 1994, 1995, and 1996 survey sites were obtained using a 36" x 48" CalComp 9500 digitizing table (CalComp, Scottsdale, AZ) to digitize coordinates from the USGS 7.5 minute series topographic maps. These coordinates should be accurate to within tens of meters. Table 1 lists the coordinates for all 1994, 1995, and 1996 survey sites.

Data Analysis

The fragmented nature of BLM land in the study area precluded a random sample of a sufficient number of pond sites to draw statistically meaningful conclusions about pond breeding amphibians. Thus, we used descriptive statistics to analyze these data.

For the stream dwelling amphibians (Tailed Frogs) we used Exact Testing (SPSS Exact Tests 6.1 for Windows, Mehta and Patel, SPSS Inc. Chicago, IL, 1995) to determine if there were any relationships between Tailed Frog occurrence and fish presence or the presence of a mine within 2 miles upstream of the sample site. However, these analyses were *post hoc* and the results of the analyses are specific to the sites that we sampled -i.e., we could not draw broad conclusions about the amphibian populations outside the study area. This study was not intended to determine the effects of mining on amphibian populations. We consider the test against mine presence to be exploratory, for the purpose of guiding future research.

RESULTS AND DISCUSSION

Possible Species

We searched of The Idaho Museum of Natural History Database of reptiles and amphibians for museum records from Benewah, Bonner, Kootenai, and Shoshone counties. Our search revealed that there are museum records for 10 species of amphibians from the study area (Table 2a). These species include: the Long-toed Salamander (*Ambystoma macrodactylum*), the Tiger Salamander (*Ambystoma tigrinum*), the Idaho Giant Salamander (*Dicamptodon aterrimus*), the Coeur d'Alene Salamander (*Plethodon idahoensis*), the Western Toad (*Bufo boreas*), the Pacific Treefrog (*Pseudacris regilla*), the Tailed Frog (*Ascaphus truei*), the Bullfrog (*Rana catesbeiana*), the Northern Leopard Frog (*Rana pipiens*), and the Spotted Frog (*Rana pretiosa*). We found 9 out of 10 potential species in the study area. Although there are museum records for Leopard Frogs within the northern portion of the study area, we failed to locate any Leopard Frog sites.

Four of the 10 species are afforded special state status. The Coeur d'Alene Salamander, the Western Toad, the Leopard Frog, and the Spotted Frog are classified as Idaho Department of Fish and Game Species of Special Concern and as BLM Sensitive species. In addition, the United States Fish and Wildlife Service (The Snake River Basin Field Office, Boise, ID) considers the Coeur d'Alene Salamander as a Watch species and the Western Toad as Watch/Species of Concern (Conservation Data Center Home Page, World Wide Web 1997).

Pond Breeding Amphibians

Long-toed Salamander

Long-toed Salamanders (*Ambystoma macrodactylum*) were widely distributed in the study area. They were present at 9 of the 14 pond sites sampled, and were relatively the most abundant of all pond breeding amphibians. Larvae were observed at all sites where they were found. Long-toed Salamander breeding habitat was characterized as permanent or ephemeral ponds, generally with emergent vegetation along the shoreline (Fig. 3). Fish were never observed in the areas where Long-toed Salamander larvae were found (See Appendix 1 for list of site characteristics).

Tiger Salamander

In 1995 we found one Tiger Salamander (*Ambystoma tigrinum*). This individual (found dead) was located in an area known to have fish (Gold Run Ponds) and was presumed to have been fish bait.

Spotted Frog

Spotted Frogs (*Rana pretiosa*) were found to be distributed across the study area, and were the second most abundant pond breeding amphibian. Spotted Frogs were present at 6 of the 14 pond sites and eggs were observed at two sites. In the study area, Spotted Frogs were found to inhabit permanent ponds and the wet marshy areas adjacent to these ponds (Fig. 4). At all sites where Spotted Frogs were found, there were shallows with emergent and submergent vegetation.

Pacific Treefrog

Our data suggest that Pacific Treefrogs are not widely distributed or abundant in the study area. Pacific Treefrogs were present at two sites in the study area and we observed tadpoles at both sites. In the study area, Pacific Treefrogs were found in small ponds (including oxbow ponds) generally with emergent vegetation along the shoreline (Fig. 3)

Western Toad

Our data also suggest that Western Toads are not widely distributed or abundant in the study area. Western Toads were present at two sites in the study area and we observed tadpoles at both sites. The two Western Toad sites were different. One site was a shallow marshy area connected to Lake Coeur d'Alene. The other was a large pond, lacking emergent vegetation, adjacent to the Coeur d'Alene River (Fig. 5).

Bullfrog

Unfortunately, we located one site with breeding Bullfrogs (Fig. 6) (Gamlin Lake). Bullfrogs (*Rana catesbeiana*), an introduced species, were the only amphibians found at that

site. This site was southwest of Sandpoint and adjacent to Lake Pend Oreille. Bullfrogs in Gamlin Lake may present a threat to native amphibian populations in the neighboring area if people transplant Bullfrogs from Gamlin to lakes in the Pend Oreille area. If possible, Bullfrogs should be removed. In addition, educational signs should be placed around the lake warning people not to take live Bullfrogs from Gamlin Lake to other lakes. Hopefully, this may slow the expansion of Bullfrog populations in the area.

Stream Breeding Amphibians

Tailed Frog

The most widely distributed and abundant stream dwelling amphibian was the Tailed Frog (*Ascaphus truei*). Tailed Frogs occurred at 9 of the 21 sites surveyed and tadpoles were found at all sites where Tailed Frogs occurred. We found adult Tailed Frogs at two sites, and three age classes of tadpoles (1 site with 3rd year tadpoles, 7 sites with 2nd year tadpoles, and 5 sites with 1st year tadpoles). Tailed Frog habitat was characterized by relatively fast moving rocky streams with little or no sediment load. The presence of tailed frogs was not positively or negatively associated with the presence of a mine two miles upstream (Fisher's Exact Test, $p = 0.20$) or the presence of fish ($p = 1.0$).

Idaho Giant Salamander

The other stream dwelling amphibian captured was a larval Idaho Giant Salamander (*Dicamptodon aterrimus*). We only found one site (Dry Creek) and one individual in three years of surveys. However, Idaho Giant Salamanders may be more wide-spread and more abundant than our data indicate. The site where the larval Idaho Giant Salamander was captured was a small stream (< 1m wide). The Substrate consisted of large cobbles (15 cm in length) and woody debris. There was complete canopy closure. This creek was dry in 1995. In 1996 Dry Creek was flowing, and we found Tailed Frog tadpoles and the larval Idaho Giant Salamander.

Terrestrial Salamanders

We found Coeur d'Alene Salamanders (*Plethodon idahoensis*) at four of the survey sites (Table 1). We also found 10 incidental Coeur d'Alene Salamander sites (Table 3). Coeur d'Alene Salamanders sites were abundant and widely dispersed in southern portion of

the study area. Coeur d'Alene Salamander habitat usually consisted of small talus or scree, with a water source (splash zone) in the talus or adjacent to it.

Management Considerations

Monitoring

We feel that the next step in this project should be to initiate a monitoring program for amphibians. After three years of surveys, we probably have a reasonable representation of what amphibians occur in the Coeur d'Alene Basin. A monitoring program would allow resource personnel to observe trends in the amphibian occurrence over time in the study area.

We selected 10 sites that are suitable for amphibian long-term monitoring (Table 4). We used the following criteria for monitoring site selection, (1) sites had to cover the study area spatially; (2) sites had to cover the range of habitats (low and high elevation ponds, forested streams, open canopy streams, and restored streams); (3) sites had to incorporate all species, with a minimum of 2 sites per species; (4) when possible, sites had to be on BLM land; and (5) all monitoring had to be able to be completed in approximately two days per season.

Monitoring consists of repeated surveys of the same site over time (e.g., consecutive years). The goal of monitoring is to determine trends in the occurrence of amphibian species over time. The sites in Table 4 should be monitored for amphibians using the same protocol used in the initial surveys (See Methods). To monitor long term trends in terrestrial salamanders follow the Coeur d'Alene Salamander Assessment (Cassirer et al. 1994).

Incidental Searching

We are lacking information about the distribution and abundance of Idaho Giant Salamanders, Western Toads, and Pacific Treefrogs in the study area. We suggest that if resource personnel come upon a new/unsurveyed pond or stream, they should search for these three species. If time allows, BLM personnel should be trained to be able to properly identify amphibians and amphibian habitat in the field. This extra effort should improve our understanding of distribution and abundance of Idaho Giant salamanders, Western Toads, and Pacific Treefrogs in the study area.

Northern Alligator Lizard surveys

Northern Alligator Lizard (*Elgaria coerulea*) surveys should be conducted in the study area. The Northern Alligator Lizard is classified as an S2 ? species by the Idaho Natural Heritage Program and a Watch species by the USFWS (The Snake River Basin Field Office, Boise, ID). Very little is known about it in Idaho.

Adaptive Management

We suggest that, if possible, BLM personnel should undertake adaptive management and monitoring of amphibian populations on a case by case basis. For example, before roads are widened or newly constructed on BLM lands, managers could survey for amphibians. If the proposed project would potentially impact amphibian habitat, managers could take actions to protect the habitat. Actions may be as minor as not widening a road in an area of known Coeur d'Alene Salamander habitat, or as drastic as re-routing the roads away from known habitat. However, protecting all habitat is not always possible. Therefore, we suggest that if a project will alter known amphibian habitat, surveys should be conducted before and after the disturbance to determine possible impacts. These types of surveys may provide base-line data about species response to disturbance and possibly the time it takes for species to recolonize disturbed habitats.

LITERATURE CITED

- Cassirer, E. F., C. R. Groves, and D. L. Genter. 1994. Coeur d'Alene Salamander conservation assessment. USDA Forest Service Region 1. 54 p.
- Nussbaum, R. A., E. D. Brodie, Jr., and R. M. Storm. 1983. Amphibians and Reptiles of the Pacific Northwest. Moscow, Idaho: University of Idaho Press.

Heyer, W. R., Donnelly, M. A., McDiarmid, R. W., Hayek, L. C., and M. S. Foster. 1994. Measuring and Monitoring Biological Diversity. Standard Methods for Amphibians. Washington, D. C. Smithsonian Institution Press.

Patla, D. A. and C. R. Peterson. 1996. Amphibians and reptiles along the Grand Loop Highway in Yellowstone National Park: Tower Junction to Canyon Village. Final Report to Yellowstone National Park. 49 p.

Stebbins, R. C. 1985. Western Reptiles and Amphibians. Boston: Houghton Mifflin Company.

Sullivan, S. R. and C. R. Peterson. 1996. Amphibians and reptiles along the highway in Yellowstone National Park: Tower Junction to the northeast entrance. Final Report to Yellowstone National Park. 60 p.

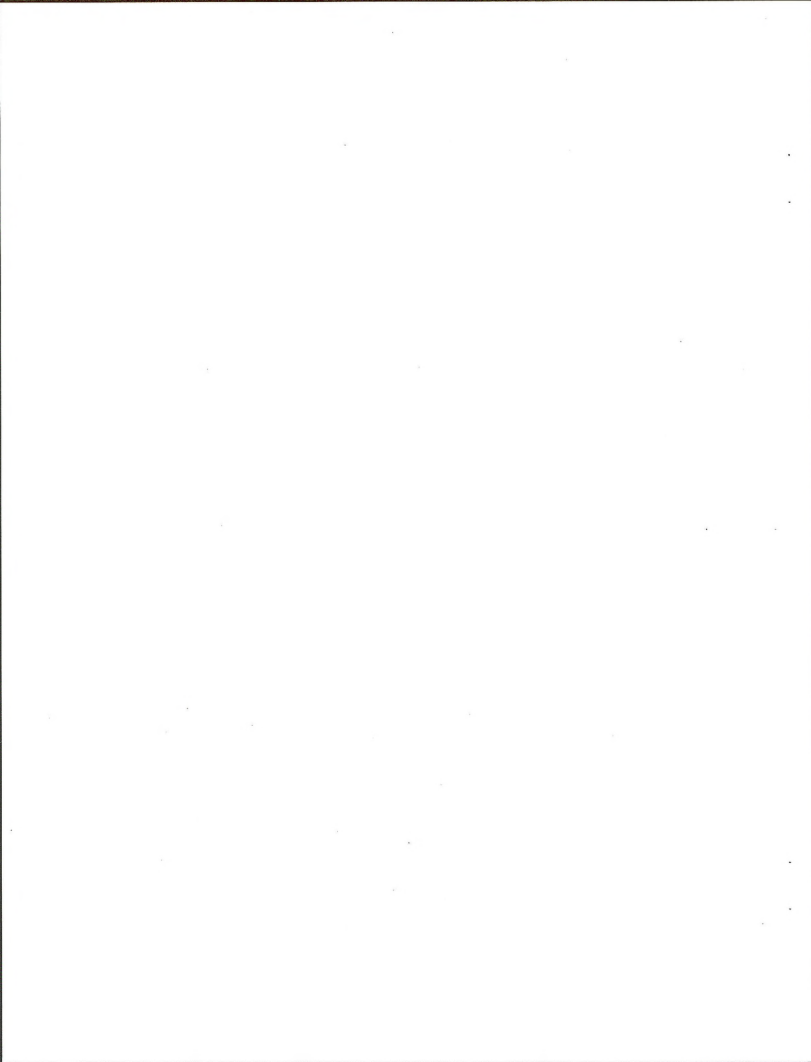


Table 1. Sites characteristics of areas sampled 1994- 1996. Site names in bold indicate a new site sampled in 1996. UTM's recorded in datum NAD27. * indicates proposed monitoring sites. **see key at bottom of table.

Site no.	Name	LOCALITY	Species found 1994/95	Species found in 1996	COUNTY	T	R	Aliquot and section	UTM EASTING (Km)	UTM NORTHING (Km)	Elevation (m)	Mine Upstream	Beck Remarks (1996)
1	*Placer Creek (stream)	Placer Creek 1.35 mi from intersection with King Street, Wallace.	ASTR	ASTR tadS	Shoshone	T47N	R4E	NE SW sec. 3	580.22697	5255.961	877.5	yes	High water, only searched edges of stream. Second visit water lower, searched entire stream.
2	Cranky Gulch (stream)	Cranky Gulch - fork of C.Glch. trail #39 and St. Joe trail#3 OR 2 miles from intersection with King Street, Wallace.	THEL, ASTR	ASTR	Shoshone	T47N	R4E	NW NE sec. 9	580.214	5255.080	876	unknown	Recently flooded, ASTR possibly washed out of stream? Second visit found ASTR.
3	Nine Mile creek (stream)	9 Mile Creek - 1.9 mi N of I-90 overpass on Nine Mile Creek Road.	none	none	Shoshone	T48N	R4E	SW NE sec. 23	582.439	5260.511	888	yes	Site highly disturbed. Entire area reclaimed, pools added, channel altered, few aquatic insects.
4	*Canyon Creek (stream)	Canyon Creek - 1.8 mi N of I-90 overpass on paved road.	none	none	Shoshone	T48N	R4E	SE SE sec. 13	584.359	5261.202	930	yes	Site highly disturbed. Entire area reclaimed, pools added, channel altered, few aquatic insects.
5	Canyon Creek Seep (pond)	Canyon Creek - 1.8 mi N of I-90 overpass on paved road, east side of creek against canyon wall.	NA	AMMA larvae	Shoshone	T48N	R4E	SE SE sec. 13	584.464	5261.336	930		2 " deep, area used as ATV trails, Adult AMMA located 100 m south of breeding pond/ Entire area dry at second visit. Presume no AMMA metamorphosed.
6	Gene Day Park (pond)	Gene Day Park - 1.7 mi W of Osburn on Warm Mullan Road.	RAPR, AMMA, THEL	RAPR, AMMA, THEL, THSI	Shoshone	T48N	R3E	SW SW sec. 12	572.804	5262.734	730.2	yes	9 RAPR adults; 4 RAPR juveniles; tadS; 1 AMMA adult (gravid), observed THSI eating RAPR adult.
7	Memorial Pond (pond)	Pond at turnout to Elk Creek.	RAPR, THEL,	RAPR, AMMA	Shoshone	T48N	R3E	NW SE sec. 3	571.778	5264.042	722.4	yes	
8	*Polaris Creek (stream)	Polaris Creek - 1.6 mi S of I-90, 1.5 mi S along improved road, hike 75 m to creek.	ASTR	ASTR	Shoshone	T48N	R3E	SE NE sec. 15	571.427	5262.200	768	yes	I found that slowly walking up stream and looking more effective than rock turning.
9	Moon Gulch (stream)	Moon Gulch - 1.4 mi N on Moon Gulch Road.	none	none	Shoshone	T49N	R3E	NE SW sec. 35	572.106	5266.265	756	yes	Recently flooded, high water.

Table 1. continued.

Site no.	Name	LOCALITY	Species found 1994/95	Species found in 1996	COUNTY	T	R	Aliquot and section	UTM EASTING (Krn)	UTM NORTHING (Krn)	Elevation (m)	Mine Upstream	Beck Remarks
10	Montgomery Creek (stream)	Montgomery Creek - 0.7 mi N of I-90	none	none	Shoshone	T48N	R3E	SW NE sec. 4	569.075	5265.054	726	yes	
11	Big Creek (stream)	Big Creek - 25 m from I-90.	none	PLID, ASTR	Shoshone	T48N	R3E	NW NW sec. 22	569.952	5260.878	784.5	yes	Found PLID in talus slope approx. 50 m north of stream site. 5 m north foot bridge w. slope.
12	Gold Run Gulch (stream)	Gold Run Gulch - .2 mi S on Gold Run Road.	ASTR, THEL	none	Shoshone	T48N	R3E	NE NE sec. 9	569.560	5264.066	720	unknown	Recently flooded, high water.
13	*Gold Run Ponds (pond)	Series of ponds - 0.8 mi E of Gold Run Road-North of Road.	RAPR, AMTI 7, THEL	RAPR, AMMA, PLID	Shoshone	T48N	R3E	SE SW sec. 3	570.526	5264.459	717	na	No pond breeding amphibians south site of road. Second trip found AMMA hatched eggs but no AMMA. PLID found in talus surrounded by aspen on the west edge of pond.
14	Jackass Creek (stream)	Jackass Creek - 0.75 mi N of I 90. North of high school.	none	ASTR- See Comments	Shoshone	T49N	R3E	NE NW sec. 31	565.817	5267.242	732	unknown	Site begins once clear of high school property. Found one ASTR tad upstream from sampling area. ASTR was immediately up-stream from collecting pool for municipal water supply.
15	*Airport Pond (pond)	Smeltonville Airport Road.	none	AMMA eggs, BUBO tads	Shoshone	T49N	R2E	NE SW sec. 34	561.779	5266.242	663	na	Found one BUBO tad swimming across pond.
16	Trapper Creek (stream)	Trapper Creek - 1 mi S of Pine Creek Rd. on Trapper Cr. Road.	THEL	PLID	Shoshone	T48N	R2E	SW SW sec. 28	558.831	5257.756	756	yes	Found PLID in trapper creek canyon. Did not resurvey Trapper creek because 1995 site was on private property.
17	Denver Creek (stream)	Denver Creek - at intersection with Route 3D.	none dry	none dry	Shoshone	T48N	R2E	SE SE sec. 28	559.825	5257.585	777	yes	Dry in 1996.
18	Highland Creek (stream)	Highland Creek - 0.4 mi NE of Route 3D.	none	none	Shoshone	T48N	R2E	SE NW sec. 34	560.949	5257.190	804	yes	
19	Blue Eagle Creek (stream)	Big Eagle Creek - at intersection with Route 3D.	none	none	Shoshone	T48N	R2E	NW SE sec. 34	561.059	5256.539	825	unknown	

Table 1. continued.

Site no.	Name	LOCALITY	Species found 1994/95	Species found in 1996	COUNTY	T	R	Aliquot and section	UTM EASTING (Km)	UTM NORTHING (Km)	Elevation (m)	Mine Upstream	Beck Remarks
20	*Dry Gulch (stream)	Dry Gulch - at intersection with Route 3D.	none	ASTR, DIAT	Shoshone	T48N	R2E	SE SE sec. 34	561.528	5256.171	820.2	unknown	Area was dry in 1995.
21	Douglas Creek (stream)	Douglas Creek - at intersection with Route 3D.	none	none	Shoshone	T47N	R2E	NE NE sec. 3	561.665	5255.636	861	unknown	Rocks very discolored with a lot of algae.
23	Latour 1st Stream (stream)	1st stream - 2.15 mi from Latour Creek Overpass.	ASTR	not sampled in 1996	Kootenai	T48N	R1W	SW NE sec. 27	541.917	5258.496	792	unknown	Private land. Did not sample in 1996.
24	Latour Across 1st Stream (stream)	Latour Creek - across from "1st stream".	not sampled in 1996	not sampled in 1996	Kootenai	T48N	R1W	SW NE sec. 27	542.033	5258.577	768	unknown	Private land. Did not sample in 1996.
25	Al's Seep (seep)	Al's seep - > 7 m S Cataldo.	PLID	not sampled in 1996	Kootenai	T47N	R1W	NW SE sec. 22	541.949	5259.271	744	unknown	Private land. Did not sample in 1996.
26	Dudly Ponds (ponds)	Ponds - 0.6 mi S of I-90 overpass near Dudley camping park.	RAPR, CHPI, THEL	not sampled in 1996	Kootenai	T48N	R1W	NW NE sec. 11	550.030	5265.208	642	na	Could not get permission to sample in 1996.
27	Butler Creek (stream)	Intersection of Rochat Divide Road and Butler Creek.	NA	ASTR	Benewah	T78N	R1W	NW NE sec. 10	541.936	5254.115	876	unknown	
28	Lost Girl Creek (stream)	Intersection of Rochat Divide Road and Lost Girl Creek.	NA	ASTR	Benewah	T47N	R1W	SE SW sec. 3	541.592	5254.378	869.7	unknown	
29	Crystal Lake (pond)	Crystal Lake.	AMMA ?	AMMA ?	Benewah	T47N	R1E	NE SW sec. 31	546.628	5247.019	1596	na	found one salamander larvae. I assumed AMMA and released without further inspection. Could have been AMTI used as fish bait.
30	*Jack Forest Pond 1 (pond)	Jack Forest Property 1st pond.	NA	AMMA, PSRE	Kootenai	T49N	R2W	NW NW sec. 6	525.920	5272.469	786	na	Excellent site for teaching field trips site contains two species; easy access.
31	Jack Forest Pond 2 (pond)	Jack Forest Property 2nd pond NA adjacent to old corral.	NA	AMMA	Kootenai	T50N	R2W	SW SW sec. 31	525.920	5272.269	762	na	Excellent site for teaching field trips site contains two species; easy access.

Table 1. continued.

Site no.	Name	LOCALITY	Species found 1994/95	Species found in 1996	COUNTY	T	R	Aliquot and section	UTM EASTING (Km)	UTM NORTHING (Km)	Elevation (m)	Mine Upstream	Beck Remarks
32	Blackwell Island	Rt. 95. 0.5 mi. south of Coeur d' Alene.	NA	none	Kootenai	T50N	R4W	NW NW sec. 14	514.674	5281.129	642	na	Found no herps.
33	Loff's Bay (pond)	Loff's Bay, Lake Coeur d' Alene.	NA	AMMA, PSRE, BUBO	Kootenai	T49N	R4W	NW NW sec. 35	512.964	5266.535	554		Very large area with several different habitat types: lake riparian (BUBU), series ponds and canals of canals (PSRE, RAPR and AMMA). Site has all speies except PLID (probably there).
34	Mica Bay (pond)	Mica Bay, Lake Coeur d' Alene.	NA	RAPR,	Kootenai	T49N	R4W	SW NE sec. 16	510.872	5271.041	645	na	All RAPR were found in mowed grass along the edge of Mica bay. Area is developed as a campground with boat docks.
35	Mica Bay Creek (stream)	Creek, bisecting BLM property.	NA	AMMA	Kootenai	T49N	R4W	SW NE sec. 16	510.867	5270.928	654	na	Adult AMMA was observed swimming across a one meter wide pool in "Mica Bay Creek".
36	*Gamlin Lake (pond)	Gamlin Lake, Glengary Road south of Sandpoint adjacent to Lake Pend Oreille.	NA	RACA, THEL	Bonner	T56N	R1E	Sec. 6,7	545.530	5341.092	630	na	Lake is filled with RACA adults and tads. RACA presence is probably reason for no other amphibian species.
37	*Antelope Lake (pond)	Antelope Lake, 2 km southeast of Clark Fork.	NA	RAPR, THEL	Bonner	T55N	R2E	NW NW sec. 12	562.925	5331.435	826.2	na	Fish present. I also found adult RAPR and RAPR juveniles, no tadpoles.

ASTR=Tailed Frog, THEL=Western Terrestrial Garter Snake, AMMA=Long-toed Salamander, RAPR= Spotted Frog, THSI=Common Garter Snake
 AMTI=Tiger Salamander, PLID=Coeur D' Alene Salamander, BUBO=Western Toad, DIAT=Idaho Giant Salamander, CHPI=painted Turtle, PSRE=Pacific Treefrog.

Table 2a. Amphibian museum records for Benewah, Bonner, Kootenai, and Shoshone counties, Idaho (Northern Intermountain Herpetological Database).

RECORD NUMBER	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	UTM Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
4440	UMMZ	Amphystomatidae	Ambystoma	macrodictylum	Benewah	Between Emerald and Summit Of Emerald Crade On Alt 95 4 Mi	527.710	5215.867	19		1967	R A NUSSBAUM	
4450	UMMZ	Amphystomatidae	Ambystoma	macrodictylum	Benewah	4 Mi N Of Summit Of Emerald Crade On U S Alt 95	527.710	5215.867	4		1968	R A NUSSBAUM	
4829	CPS	Amphystomatidae	Ambystoma	macrodictylum	Benewah	Plummer, 6 mi. S on US 95 Couer d'Alene	507.631	5242.471	12	September	1939		
1664	CAS	Amphystomatidae	Ambystoma	macrodictylum	Bonner	Priest Lake	510.098	5383.208	15	July	1927	E.C. VanDyke	
1665	CAS	Amphystomatidae	Ambystoma	macrodictylum	Bonner	Priest Lake	510.098	5383.208	15	July	1927	E.C. VanDyke	
1666	CAS	Amphystomatidae	Ambystoma	macrodictylum	Bonner	Priest Lake	510.098	5383.208	15	July	1927	E.C. VanDyke	
1667	CAS	Amphystomatidae	Ambystoma	macrodictylum	Bonner	Priest Lake	510.098	5383.208	15	July	1927	E.C. VanDyke	
1668	CAS	Amphystomatidae	Ambystoma	macrodictylum	Bonner	Priest Lake	510.098	5383.208	19	June	1960	E.C. VanDyke	
4917	CPS	Amphystomatidae	Ambystoma	macrodictylum	Bonner	2 miles North of Blanchard			6	June	1946	MCJ	
298	CAS	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	Sand Point	532.944	5346.832	7	August	1893	Gilbert & Jenkins	
299	CAS	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	Sand Point	532.944	5346.832	5	August	1921	Gilbert & Jenkins	
2067	IMNH	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	7.1 miles from Beauty Bay on Alt. 95 toward St. Maries	519.341	5273.405	25	April	1962		
2068	IMNH	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	7.1 miles from Beauty Bay on Alt. 95 toward St. Maries	519.341	5273.405	25	April	1962		
2069	IMNH	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	7.1 miles from Beauty Bay on Alt. 95 toward St. Maries	519.341	5273.405	25	April	1962		
2070	IMNH	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	7.1 miles from Beauty Bay on Alt. 95 toward St. Maries	519.341	5273.405	25	April	1962		
2071	IMNH	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	7.1 miles from Beauty Bay on Alt. 95 toward St. Maries	519.341	5273.405	25	April	1962		
2072	IMNH	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	7.1 miles from Beauty Bay on Alt. 95 toward St. Maries	519.341	5273.405	25	April	1962		
2073	IMNH	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	7.1 miles from Beauty Bay on Alt. 95 toward St. Maries	519.341	5273.405	25	April	1962		
2074	IMNH	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	7.1 miles from Beauty Bay on Alt. 95 toward St. Maries	519.341	5273.405	25	April	1962		
3125	UCM	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	2.5 mi SW Coeur d'Alene, 2000	511.897	5277.962	6	August	1949		
3132	UCM	Amphystomatidae	Ambystoma	macrodictylum	Kootenai	9 mi E Coeur d'Alene	532.874	5281.464	17	June	1963		
4906	CPS	Amphystomatidae	Ambystoma	macrodictylum	Shoshone	Willow Cr. 1 mi. E of Mullan	588.696	5257.678	21	July	1937	F. Blackman (?)	2 larvae
5643	CRCM	Amphystomatidae	Ambystoma	macrodictylum	Bonner ?	Lake Perd Crele, Maiden Rock	536.796	5327.233	5	Aug.	1947	G.F. Jones	pickled, Don. by Gardner Jones; #47-41
3346	UIM	Amphystomatidae	Ambystoma	igninum	Benewah	Lake Chalcolet	347.960	4141.247	26	June	1966	D. Gayman	larvae purchased at tackle shop
3348	UIM	Amphystomatidae	Ambystoma	igninum	Benewah	Lake Chalcolet	304.299	4667.216	04	July	1966	D. Gayman	larvae, Gayman #45; purchased at tackle shop
3311	UIM	Amphystomatidae	Ambystoma	igninum	Kootenai	Black Lake	525.605	5264.840	04	July	1966	D. Gayman	larvae, Gayman #44 & #46
4821	KU	Amphystomatidae	Ambystoma	igninum	Shoshone	Pinehurst	556.273	5264.645					
4587	KU	Ascaphidae	Ascaphus	truxi	Shoshone	Bird Creek, Tributary to St. Joe River	603.396	5232.201	23	July	1964		Status: F. CAS Field Nos. DCC 1720-1722, respectively
4588	KU	Ascaphidae	Ascaphus	truxi	Shoshone	Bird Creek, Tributary to St. Joe River	603.396	5232.201	23	July	1964		Status: F. SV 44 & CAS. Field No. DCC 1723
3285	UIM	Bufoidae	Bufo	boreas	Benewah	Emerald Creek	551.373	5213.301	20	June	1954	P. Dumas	subadult

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RECORD NUMBER	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	UTM Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
3018	LACM	Bufoidae	Bufo	boreas	Bonner	SW end Priest Lake	507.990	5371.574	18	September	1969	D. Howell	Track, 2.5 m from outlet Shoshone Bay cottage
3043	LACM	Bufoidae	Bufo	boreas	Bonner	Priest Lake Golf Course, 2 m S Nordman	502.000	5382.468	8	July	1970	D. Howell	lot of 99 juveniles
3962	UIM	Bufoidae	Bufo	boreas	Bonner	Hager Lake N of Coolin	502.204	5382.452	09	August	1958	F. Rabe, P. Gier, & P. Lindeman	larvae, caught in insect activity traps; exact number of specimens unknown
4678	USNM	Bufoidae	Bufo	boreas	Bonner	Clark Fork	561.236	5332.739				Not Verified	"Nabute" wet. Presence not verified." Femur removed by Dr. Foote. Probably not Kootenai River.
4961	MVZ	Bufoidae	Bufo	boreas	Bonner	5 MI W COCALALLA	520.155	5327.478	27	July	1932	ORR R.T.	
4962	MVZ	Bufoidae	Bufo	boreas	Bonner	5 MI W COCALALLA	520.155	5327.478	27	July	1932	ORR R.T.	
4963	MVZ	Bufoidae	Bufo	boreas	Bonner	5 MI W COCALALLA	520.155	5327.478	25	July	1932	ORR R.T.	
4964	MVZ	Bufoidae	Bufo	boreas	Bonner	5 MI W COCALALLA	520.155	5327.478	26	July	1932	ORR R.T.	
4966	MVZ	Bufoidae	Bufo	boreas	Bonner	5 MI W COCALALLA	520.155	5327.478	27	July	1932	MILLER A.H.	
4969	MVZ	Bufoidae	Bufo	boreas	Bonner	5 MI W COCALALLA	520.155	5327.478	25	July	1932	MILLER A.H.	
17	AMNH	Bufoidae	Bufo	boreas	Kootenai	on Floodwood River, ca. 30 miles E of Clarkie 3-4000'	582.109	5205.943					
328	CAS	Bufoidae	Bufo	boreas	Kootenai	Mt. Carlton			18	July	1894	J.D. Snyder	
329	CAS	Bufoidae	Bufo	boreas	Kootenai	Blue Lake	523.773	5259.290	18	July	1894	J.D. Snyder	
330	CAS	Bufoidae	Bufo	boreas	Kootenai	Blue Lake	523.773	5259.290	11	July	1894	J.D. Snyder	
331	CAS	Bufoidae	Bufo	boreas	Kootenai	Blue Lake	523.773	5259.290	14	August	1949	J.D. Snyder	
3713	UIM	Dicamptodontidae	Dicamptodon	ensatus	Benewah	Manninging Creek, 12 mi. north of Harvard	525.066	5211.416	31	July	1969	R. Wallace	larvae, collected by shocker from Manninging Creek
3720	UIM	Dicamptodontidae	Dicamptodon	ensatus	Benewah	Manninging Creek, 12 mi. N of Harvard	525.066	5211.416	06	August	1968	R. Wallace	larva
3949	UIM	Dicamptodontidae	Dicamptodon	ensatus	Benewah	Manninging Creek, 12 mi. N of Harvard	525.066	5211.416	01	April	1966	R. Wallace & Herp class	adult in teaching collection
3994	UIM	Dicamptodontidae	Dicamptodon	ensatus	Shoshone	Black Prince Creek, trib. St. Joe River	574.052	5239.664	04	September	1976	G. Mauser & R. Anderson	larvae, collected by shocker
3902	UIM	Dicamptodontidae	Dicamptodon	ensatus	Shoshone	Slate Creek, trib. St. Joe River	563.721	5244.827	24	August	1977	G. Mauser & R. Anderson	larvae, collected by shocker
3906	UIM	Dicamptodontidae	Dicamptodon	ensatus	Shoshone	Fly Creek, trib. St. Joe River	618.873	5216.773	19	August	1977	G. Mauser & R. Anderson	larvae, collected by shocker
3919	UIM	Dicamptodontidae	Dicamptodon	ensatus	Shoshone	M.F. Pine Creek, trib. Coeur d'Alene River			15	August	1969	P. Laumeyer	larva
3952	UIM	Dicamptodontidae	Dicamptodon	ensatus	Shoshone	near mouth of Nugget Creek, trib. St. Joe River	609.097	5229.778	11	May	1966	G. Mauser & R. Anderson	larva collected by shocker
4823	CPS	Dicamptodontidae	Dicamptodon	aterrimus	Benewah	Manninging Cr.	524.767	5210.303	12	September	1939	JRS	CPS database record has "D. ensatus"
4824	CPS	Dicamptodontidae	Dicamptodon	aterrimus	Benewah	Manninging Cr.	524.767	5210.303	12	September	1939	JRS	CPS database record has "D. ensatus"
4825	CPS	Dicamptodontidae	Dicamptodon	aterrimus	Shoshone	Rock Run Cr. in deep canyon W of Monumental Peak			2	August	1940	WCB	CPS database record has "D. ensatus"
5247	MVZ	Dicamptodontidae	Dicamptodon	ensatus	Benewah	1 MI W OF COUNTY LINE BY U.S. ALTER 95	524.965	5210.584	14	August	1962	WINDOKURR M.	
3547	UIM	Hyla	Hyla	regilla	Benewah	Chalcolet Lake	708.793	4708.861	24	April	1958	P. Dumas	adult
3568	UIM	Hyla	Hyla	regilla	Bonner	none	532.944	5346.832	13	April	1956	Watz	collection missing

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3609	UM	Hylidae	<i>Hyla</i>	<i>regilla</i>	Bonner	none	532.944	5346.832	07	May	1968	J. Waletz	ad# actual collection date is May 1958
3740	UIM	Hylidae	<i>Hyla</i>	<i>regilla</i>	Bonner	7 mi. NW of Priest River	500.208	5344.807	18	May	1964	Spurgeon	adult
3745	UIM	Hylidae	<i>Hyla</i>	<i>regilla</i>	Bonner	7 mi. NW of Priest River	548.975	4777.367	05	April	1968	R. Lee	adult
3803	UIM	Hylidae	<i>Hyla</i>	<i>regilla</i>	Bonner	Priest River	506.849	5336.359	30	March	1969	Vedder	subadult
5123	MVZ	Hylidae	<i>Hyla</i>	<i>regilla</i>	BONNER	BANKS OF DISAPPEARING CR., 7.5 MI [RD] W U.S. ALT. 10 VIA LAKESHORE DR., S OF SANDPOINT, CEDAR HEMLOCK FOREST			19	August	1962	TEBERG E.K.	
2279	IMNH	Hylidae	<i>Pseudacris</i>	<i>regilla</i>	Bonner	Sagle	533.145	5338.827		August	1962		
3024	LACM	Hylidae	<i>Pseudacris</i>	<i>regilla</i>	Bonner	SW end of Priest Lake (cabin area)	507.996	5371.574	10	September	1969	D. Howell	
3032	LACM	Hylidae	<i>Pseudacris</i>	<i>regilla</i>	Bonner	Lamb Creek, ca. 7 miles S Nordman	504.613	5374.275	11	July	1970	D. Howell	
3033	LACM	Hylidae	<i>Pseudacris</i>	<i>regilla</i>	Bonner	Priest Lake	510.098	5383.208	8	July	1970	D. Howell	
3054	LACM	Hylidae	<i>Pseudacris</i>	<i>regilla</i>	Bonner	1.5 miles W Nordman, ca 2600 ft. (TEHN. RESV. Sec 22)	502.128	5365.492	14	August	1976	D. Howell	
4832	CPS	Hylidae	<i>Pseudacris</i>	<i>regilla</i>	Bonner	Priest Lake, Lily Bay.	505.730	5375.968	9	September	1939	JRS	CPS database record has "Hyla regilla"
4833	CPS	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Shoshone	Site N Fork of Clearwater R. 5 mi. E of Hwy crossing from Avery to Clark	563.859	5215.427	2	August	1940	WCB	
2026	FMNH	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Benewah	East Fork Charley Creek, Near Embs	531.393	5217.638					
3714	UIM	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Benewah	Manning Creek, 12 miles N of Harvard	525.066	5211.416	02	June	1968	R. Wallace	adult
5609	UF	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Benewah	12.2 mi. S. of Harvard in Manning Creek	525.069	5210.608	22	July	1967	Ron A. Nussbaum	Ron A. Nussbaum to Albert Schwartz to L.D. Ober (5139-40). Two tadpoles
5120	MVZ	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	BONNER	HIGH ON S FORK WELLINGTON CR.; SWIMMING IN POOL AT BASE OF CREEK	558.932	5347.655	24	July	1964	TEBERG E.K.	
5121	MVZ	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	BONNER	WEEED ON RATTLE CR.; CA. 1 MI ABOVE LIGHTNING CR.; HEMLOCK	562.822	5352.688	24	July	1964	TEBERG E.K.	
5127	MVZ	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	BONNER	HEMLOCK ABOVE LIGHTNING CR.; IN CREVICE WET BY DRIPS	561.885	5363.093	23	July	1964	TEBERG E.K.	
3065	LACM	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Kootenai	Cedar Canyon E. of Cour d'Alene			3	September	1949	S. & D. Mutak	10 tadpoles
3932	UIM	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Kootenai	S.F. Cedar Creek, 0.5 mi. S of I-80	532.098	5273.449	25	August	1985	P. Connolly	adult
5145	MVZ	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Kootenai	BEAUTY CR.; AT INFLOW OF CARIBOU CR.	525.611	5271.833	29	June	1982	GOODD.A.	
2046	FMNH	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Shoshone	Brd Trib. To St. Joe River	603.977	5233.778					
3011	LACM	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Shoshone	Brd Cr., Trib. to St. Joe River	603.977	5233.778	23	July	1964	Metter	
3017	LACM	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Shoshone	Brd Cr., Trib. to St. Joe River	603.977	5233.778	22	July	1964	Metter	
3918	UIM	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Shoshone	tributary to St. Joe River, Prospector Creek, 9 miles E of Avery	604.204	5226.838	21	August	1978	J. Cooper	adult
3953	UIM	Leiopeltidae	<i>Ascaphus</i>	<i>truel</i>	Shoshone	near mouth of Nugget Creek, tributary of St. Joe River	609.057	5229.778	15	August	1969	G. Mauter & R. Anderson	larvae collected with electroshocker

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4919	CPS	Leopelmatidae	Ascaphus	triseri	Shoshone	Jordan Divide			24	September	1954	MLJ	
4920	CPS	Leopelmatidae	Ascaphus	triseri	Shoshone	Upper Shoshone Cr. near Jordan Saddle			26	September	1954	MLJ	
4993	MVZ	Leopelmatidae	Ascaphus	triseri	Shoshone	BIRD CR., TRIBUTARY OF ST. JOE CR.; CA. 8 MI FROM MONTANA LINE			23	July	1963	METTER D.	
4999	MVZ	Leopelmatidae	Ascaphus	triseri	Shoshone	BIRD CR., TRIBUTARY OF ST. JOE CR.; CA. 8 MI FROM			23	July	1963	METTER D.	
5004	MVZ	Leopelmatidae	Ascaphus	triseri	Shoshone	BIRD CR., TRIBUTARY OF ST. JOE CR.; CA. 8 MI FROM MONTANA LINE			23	July	1963	METTER D.	
5005	MVZ	Leopelmatidae	Ascaphus	triseri	Shoshone	BIRD CR., TRIBUTARY OF ST. JOE CR.; CA. 8 MI FROM MONTANA LINE			23	July	1963	METTER D.	
4579	USD	Plethodontidae	Plethodon	idahoensis	Bonner	Wolf Lodge Bay	522 733	5274 030	8	September	1953		USD collection states "P. vandykei idahoensis" should be Kootenai Co.
4580	USD	Plethodontidae	Plethodon	idahoensis	Bonner	Wolf Lodge Bay	522 733	5274 030	9	June	1952		USD collection states "P. vandykei idahoensis" should be Kootenai Co.
4581	USD	Plethodontidae	Plethodon	idahoensis	Bonner	Wolf Lodge Bay	522 733	5274 030	8	September	1953		USD collection states "P. vandykei idahoensis" should be Kootenai Co.
4538	SRSU	Plethodontidae	Plethodon	idahoensis	Kootenai	Talus slope on Lake Coeur d'Alene	513 215	5254 557					SRSU collection states "P. vandykei idahoensis"
4553	UL	Plethodontidae	Plethodon	idahoensis	Kootenai	5 mi. from junction of Alt. 95 & interstate 90 on Alt. 95 toward St. Maries			25	April	1962	Linder	UL collection states "P. vandykei"
4555	UL	Plethodontidae	Plethodon	idahoensis	Kootenai	5 mi. from junction of Alt. 95 & interstate 90 on Alt. 95 toward St. Maries			25	April	1962	Linder	UL collection states "P. vandykei"
4622	KU	Plethodontidae	Plethodon	idahoensis	Kootenai	Lake Coeur d'Alene, Wolf Bay	522 733	5274 030	22	August	1950		Field No. WED 49. KU computer record has "P. vandykei"
4721	USNM	Plethodontidae	Plethodon	idahoensis	Kootenai	Coeur d'Alene Lake, NE corner of	519 395	5278 466	13	September	1939	Slater, James R.	"Holaro: wet. Presence not verified." Collection #2719. Elev. 2160 ft.
4722	USNM	Plethodontidae	Plethodon	idahoensis	Kootenai	Coeur d'Alene Lake, NE corner of	519 395	5278 466	13	September	1939	Slip, John W.	"Holaro: wet. Presence not verified." Collection #JVS 3913c3. Elev. 2160 ft. Paratype of Plethodon idahoensis (Slater & Slip).
4723	USNM	Plethodontidae	Plethodon	idahoensis	Kootenai	Coeur d'Alene, near.	518 890	5280 620	14	April	1945	Hilton, William A.	"Holaro: wet. In collection." Accession #186657. Donated by Pomona College
4724	USNM	Plethodontidae	Plethodon	idahoensis	Kootenai	Coeur d'Alene, near.	518 890	5280 620	14	April	1945	Hilton, William A.	"Holaro: wet. Exchanged." Accession #186657. Exchanged to MCG, Harvard University, Jan. 12/42. 7 August 1958
4725	USNM	Plethodontidae	Plethodon	idahoensis	Kootenai	Coeur d'Alene Lake, NE of S shore of Wolf Lodge Bay, foot of N facing slope.	525 816	5273 737	26	August	1968	Jacobs, Jeremy F.	"Holaro: wet. In collection." Accession #282426. Col. # DN-102 & DN-101, respectively. Elev. 2160 ft. Donated by Jacobs, George
4726	USNM	Plethodontidae	Plethodon	idahoensis	Kootenai	Coeur d'Alene Lake, along the S shore of Wolf Lodge Bay, 0.5 mi SW of Jct U.S. Rte 1-90 & Idaho Rte. 97, on Idaho Rte. 97.	526 101	5273 642	28	June	1981	Jacobs, George J.; Jacobs, Meja L.	"Holaro: wet. In collection." Accession #362095. On NNW slope of hillside along road - talus slope. Donated by Jacobs, George J.
4727	USNM	Plethodontidae	Plethodon	idahoensis	Kootenai	Coeur d'Alene Lake, NE end of, Wolf Lodge Bay	522 733	5274 030	26	August	1968	Jacobs, Jeremy F.	"Holaro: wet. In collection." Accession #362095. Col. #DN 103.
5192	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521 870	5273 866	19	April	1948	LOWE C.H.	
5201	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521 870	5273 866	19	April	1948	STEBBINS R. C.	
5203	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521 870	5273 866	19	April	1948	STEBBINS R. C.	
5204	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521 870	5273 866	19	April	1948	STEBBINS R. C.	

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RECORD NUMBER	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	UTM Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
5207	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	STEBBINS R.C.	
5212	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	STEBBINS R.C.	
5213	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	STEBBINS R.C.	
5214	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	STEBBINS R.C.	
5231	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	LOWE C.H.*	
5232	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	LOWE C.H.*	
5233	MVZ	Plethodontidae	Plethodon	idahoensis	KOOTENAI	COEUR DALENE LAKE	515.745	5270.761	7	June	1964	KEZER J.	
5234	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	LOWE C.H.*	
5235	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	LOWE C.H.*	
5236	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	LOWE C.H.*	
5243	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	LOWE C.H.*	
5244	MVZ	Plethodontidae	Plethodon	idahoensis	KOOTENAI	COEUR DALENE LAKE	515.745	5270.761	7	June	1964	KEZER J.	
5245	MVZ	Plethodontidae	Plethodon	idahoensis	KOOTENAI	COEUR DALENE LAKE	515.745	5270.761	7	June	1964	KEZER J.	
5246	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	STEBBINS R.C.	
5250	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	CA. 1 MI UPSTREAM OF BEAUTY BAY, N END LAKE COEUR DALENE	523.790	5275.036	15	August	1962	WINKUR R.M.	
5251	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	STEBBINS R.C.	
5252	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	LOWE C.H.*	
5253	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	LOWE C.H.*	
5254	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	STEBBINS R.C.	
5255	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	STEBBINS R.C.	
5256	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	STEBBINS R.C.	
5257	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR DALENE LAKE	521.870	5273.866	19	April	1948	STEBBINS R.C.	
5586	URNMH	Plethodontidae	Plethodon	idahoensis	Kootenai	Coeur d'Alene	518.505	5281.716	17	April	1945	W. A. Hilton	
5587	URNMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Kezer	intestines removed and examined for parasites
5588	URNMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Kezer	intestines removed and examined for parasites
5589	URNMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Kezer	
5590	URNMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Kezer	

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RECORD NUMBER	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	UTM Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
5591	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5592	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5593	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5594	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5595	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5596	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5597	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5598	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5599	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5600	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5601	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5602	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5603	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5604	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5605	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Keizer	
5607	UF	Plethodontidae	Plethodon	idahoensis	Kootenai	Coeur d'Alene Lake, Wolf Lodge Bay	525.071	5273.743	15	May	1955	C. Dumas	8060-1 cleared and stained, 6060-2 alcoholic. Topotypes. JN #RH122.
5661	CRCM	Plethodontidae	Plethodon	idahoensis	Kootenai	Lake Coeur d'Alene	515.745	5270.761	9	June	1952	Don Durvap	provided. Det. D. M. Cochran
5662	CRCM	Plethodontidae	Plethodon	idahoensis	Kootenai	Lake Coeur d'Alene	515.745	5270.761	8	Sept.	1953	Don Durvap	Wolf Lodge Bay
3066	MCZ	Plethodontidae	Plethodon	vandykei	Kootenai	near Coeur	516.710	5281.246				none	
3457	UIM	Plethodontidae	Plethodon	vandykei	Benewah	5.5 mi. SW of Ennis	526.369	6212.370	28	September	1968	P. Dumas	606143N R3W NE1/4
3685	UIM	Plethodontidae	Plethodon	vandykei	Benewah	unmarked cr. 1/2 mi. St. Joe R., adjacent to Mrs. Gurn	546.691	5241.365	30	September	1987	C. Groves	subadult 146N R1E S7
12	AMNH	Plethodontidae	Plethodon	vandykei	Kootenai	Coeur d'Alene Lake							

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1893	CM	Plethodontidae	Plethodon	vandykei	Kootenai	0.5 Mi Sw Jct I-40 & 16-97, Along S Shore Wolf Lodge Bay	526.173	5273.688				G And M	GEORGE JACOBS COLLECTION. LOCATION ON LAKE COEURD'ALENEON TALLUS SLOPE OF NW HILLSIDE
1894	CM	Plethodontidae	Plethodon	vandykei	Kootenai	0.5 Mi Sw Jct I-40 & 16-97, Along S Shore Wolf Lodge Bay	526.173	5273.688				G And M	GEORGE JACOBS COLLECTION. LOCATION ON LAKE COEURD'ALENEON TALLUS SLOPE OF NW HILLSIDE
2035	FMNH	Plethodontidae	Plethodon	vandykei	Kootenai	Coeur d'Alene	516.710	5281.246					
2079	BMNH	Plethodontidae	Plethodon	vandykei	Kootenai	5 miles from jct. of Al. 95 and Int. 90	522.350	5272.680	25	April	1962		
2080	BMNH	Plethodontidae	Plethodon	vandykei	Kootenai	5 miles from jct. of Al. 95 and Int. 90	522.350	5272.680	25	April	1962		
2081	BMNH	Plethodontidae	Plethodon	vandykei	Kootenai	5 miles from jct. of Al. 95 and Int. 90	522.350	5272.680	25	April	1962		
2082	BMNH	Plethodontidae	Plethodon	vandykei	Kootenai	5 miles from jct. of Al. 95 and Int. 90	522.350	5272.680	25	April	1962		
2083	BMNH	Plethodontidae	Plethodon	vandykei	Kootenai	5 miles from jct. of Al. 95 and Int. 90	522.350	5272.680	25	April	1962		
2084	BMNH	Plethodontidae	Plethodon	vandykei	Kootenai	5 miles from jct. of Al. 95 and Int. 90	522.350	5272.680	25	April	1962		
2085	BMNH	Plethodontidae	Plethodon	vandykei	Kootenai	5 miles from jct. of Al. 95 and Int. 90	522.350	5272.680	25	April	1962		
3006	LACM	Plethodontidae	Plethodae	vandykei	Kootenai	Coeur d'Alene	516.710	5281.246	15	April	1960	J. W. Knudson	
3046	LACM	Plethodontidae	Plethodon	vandykei	Kootenai	Lake Coeur d'Alene, So. shore Beauty Bay	523.961	5273.087	15	April	1968	D. R. Paulson, R. A. Hasabaum	
3128	UCM	Plethodontidae	Plethodon	vandykei	Kootenai	Woolfodge Bay, Coeur d'Alene Lake	525.430	5274.040	15	May	1955		
3130	UCM	Plethodontidae	Plethodon	vandykei	Kootenai	Beauty Bay, Coeur d'Alene Lake	524.279	5273.075	5	May	1955		
3229	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Wolf Lodge Bay, Coeur d'Alene Lake	525.430	5274.040	17	September	1985	P. Dumas	collection missing, T49N, R3W
3239	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Wolf Lodge Bay, Coeur d'Alene Lake	525.430	5274.040	24	September	1987	P. Dumas	collection missing, T49N, R3W
3249	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Wolf Lodge Bay, Lake Coeur d'Alene	525.430	5274.040	03	May	1965	P. Dumas	adult T49N R3W
3307	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Beauty Bay, Coeur d'Alene Lake	524.279	5273.075	15	September	1968	P. Dumas	collection missing, T49N, R3W, S11
3629	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Beauty Bay, south shore, Lake Coeur d'Alene	524.279	5273.075	11	May	1968	R. Wallace	adult T49N R3W S11
3700	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Beauty Bay, Lake Coeur d'Alene	524.279	5273.075	01	June	1969	R. Wallace	adult, some juveniles, T49N, R3W, S11
3832	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Beauty Bay, Lake Coeur d'Alene	524.279	5273.075	02	October	1969	R. L. Wallace	adult, 3 subadults, T49N, R3W, S11
3839	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Beauty Bay, 3.8 mi on Hwy 95A, Lake Coeur d'Alene	545.112	4772.869	05	June	1971	E. Brodie Jr. & J. Briggs	Subadult, 1 Adult, R49N, R3W, S11
3846	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Beauty Bay, Lake Coeur d'Alene	524.279	5273.075	20	May	1976	R. L. Wallace	subadult, 1 adult, T49N, R3W, S11
3860	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Beauty Bay, Lake Coeur d'Alene (damp area near stream)	524.279	5273.075	17	September	1978	R. L. Wallace	Adult, 7 Subadult, T49N, R3W, S11
3884	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Beauty Bay, Lake Coeur d'Alene	524.279	5273.075	17	September	1978	R. L. Wallace	adult, 10 Subadult, T49N, R3W, S11
3920	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Beauty Creek, north Coeur d'Alene Lake (substrate frozen at 2' depth)	524.279	5273.075	12	April	1980	R. Wallace & J. Lynch	adult, 2 subadults, T49N, R2W, S16-19
3921	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Wolf Lodge Bay near type locality, Coeur d'Alene Lake			25	June	1978	R. Wallace & J. Lynch	adult, 3 subadult, T49N, R3W, S11

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3922	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Unramed Creek, north Beauty Bay Couer d'Alene Lake	523.865	5272.096	15	May	1955	R. Wallace & J. Lynch	adult, 149N R3W S11
3923	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Along road by Beauty Bay (black morph site)	524.279	5273.075	23	October	1977	R. Wallace & J. Lynch	adult, 4 subadult, 149N R3W S11
3924	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Beauty Creek	525.905	5271.374	17	September	1985	R.L. Wallace	adult, 1 subadult, 149N, R3W, S11
3963	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Unramed Cr. entering Beauty Bay, Couer d'Alene Lake	523.665	5272.096	10	May	1960	J. Howard	subadult, electrophoretic specs.; voucher spec. 149N R3W S11
3986	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	NF Couer d'Alene River, 0.6 mi downstream of mouth of LaVerne Cr.	546.879	5282.756	05	June	1967	C. Groves	adult, 150N, R1E, S7
3993	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Cabouse Cr., Kootenai R. Drge.	565.532	5387.758	28	September	1989	C. Groves	Adult, 161N R3E S8
3995	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Stewich Cr. trib. Marie Cr. Wolf Lodge Cr., C. d'Alene Lake	535.987	5280.913	20	April	1986	C. Groves	juvenile, 150N R2W S24
3996	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Marie Cr., trib. Wolf Lodge Cr., Couer d'Alene Lake	535.242	5277.784	10	May	1986	C. Groves	juvenile, 150N R1W S20
3913	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Swish Creek, 3 miles east of Avery	555.066	5231.517	12	April	1980	R.L. Wallace	adult, 145N R6E S19
3914	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Along St. Joe River, 12 miles east of Avery	603.400	5232.225	12	April	1980	R.L. Wallace	adult, S. side of river; 145N R7E
3955	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Big Creek, 3 miles above Big Creek campground, at end of road, trib. St. Joe River	555.061	5238.550	19	September	1985	R.L. Wallace	Subadult, 6 Subadults, 2 Adults site originally found by Al Wilson; 146N, R3E, S7
3956	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Along St. Joe River road, about 9 miles above Calder	555.061	5238.550	19	June	1985	R.L. Wallace	Subadult, 3 Adults, 5 Subadults, 145N, R3E
3957	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Swish Creek, trib. St. Joe River	592.467	5228.635	16	October	1986	R.L. Wallace	Subadult, 1 Adult, 4 Subadult, 145N, R6E, S19
3958	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Along St. Joe River Rd., about 12.2 mi. above Calder	549.988	5241.476	21	March	1986	R.L. Wallace	Subadult, 2 Adult, 4 Subadult, 145N, R4E
3977	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	NF St. Joe River, 0.4 mi above mouth (east side of old rd.)	591.303	5234.274	29	September	1987	C. Groves	adult, 2 adults, 1 juvenile, 145N R5E S11
3978	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	NF St. Joe River, 1.6 mi above mouth (east side of old rd.)	592.413	5235.051	29	September	1987	C. Groves	adult, 2 adults, 1 juvenile, 145N R5E S12
3979	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	St. Joe River Rd., 0.8 mi downstream of mouth of Main Cr.	608.524	5230.161	29	September	1987	C. Groves	adult, 4 adults, 1 juvenile, 145N R7E S20
3980	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	St. Joe River Rd., 1.5 mi above Shady Cr.			29	September	1987	C. Groves	adult, 8 subadult upstream site along St. Joe River; 144N R8E S09/12
3981	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Fishhook Cr., 4.5 mi above mouth, trib. St. Joe River	587.371	5228.155	28	September	1987	C. Groves	adult, 1 adult, 4 juveniles, 144N R5E S49W/14
3982	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Marble Cr., 1.3 mi above mouth of Boulder Cr., (St. Joe River Cr.)	573.100	5229.746	27	September	1987	C. Groves	subadult, 145N R3E S25NW/14
3963	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	St. Joe River Rd., 4.2 mi above mouth of Marble Cr.	569.030	5235.407	30	September	1987	C. Groves	adult, 1 seep, s. side of road; 145N R4E S16
3984	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	St. Joe River Rd., 2.3 mi above Avery Ranger Station	567.167	5233.216	30	September	1987	C. Groves	adult, seep, s side of rd.; 145N R5E S7
3987	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Couer d'Alene River, 2.6 mi above Kit Price Campground			15	May	1989	C. Groves	adult, 151N, R3E, S23
3988	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Couer d'Alene River, 0.3 mi above mouth, Cardinal Cr.			03	October	1989	C. Groves	adult, 1 juvenile, 152N, R3E, S28
3350	UIM	Ranidae	Rana	callesbeiana	Kootenai	Back Lake	529.805	5254.840	21	May	1967	D. Gayman	adult
3351	UIM	Ranidae	Rana	callesbeiana	Kootenai	Fernan Lake	520.720	5279.931	01	September	1967	anon.	adult
4826	CPS	Ranidae	Rana	callesbeiana	Kootenai	Harrison	515.068	5255.563	13	September	1939	JRS	Tadpoles
4912	CPS	Ranidae	Rana	callesbeiana	Kootenai	2 mi. N of Harrison	515.143	5258.745	13	September	1939	JRS	

Table 2a. Amphibian museum records for Benewah, Bonner, Kootenai, and Shoshone counties, Idaho (Northern Intermountain Herpetological Database).

RECORD NUMBER	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	UTM Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
4030	USNM	Ranidae	Rana	calesiana	Kootenai	Coeur d'Alene Lake, NE end of Wolf Lodge Bay.	522 733	5274 030	26	August	1965	Jacobs, Douglas B.	"Nature wet. In collection." Collection #V 134. Donated by Jacobs, George J. Accession #302050
3608	UIM	Ranidae	Rana	pipiens	Bonner	none	532 944	5346 832	18	May	1964	J. Waltz	adult subadult, actual collection date is May 1958
3308	UIM	Ranidae	Rana	pipiens	Bonner	Coccolalla	528 595	5327 941	17	June	1955	J. Keating	larvae
4691	USNM	Ranidae	Rana	pipiens	Bonner	Sandpoint	533 303	5347 792	20	September	1892	Not Verified	"Nature wet. Presence not verified." Accession #027718
4694	USNM	Ranidae	Rana	pipiens	Bonner	Hope, near Lake Pend Oreille	551 477	5343 927	1	July	1896	Not Verified	"Nature wet. Presence not verified." Donated by Bureau of Fisheries.
4695	USNM	Ranidae	Rana	pipiens	Bonner	Lake Pend d'Oreille, Baird Island			15	July	1896	Not Verified	"Nature wet. Presence not verified." Donated by Bureau of Fisheries.
4907	CPS	Ranidae	Rana	Pipiens	Bonner	5 mi NE of Sand Point	539 912	5351 538	11	September	1939	JRS	CPS database record has "R. pipiens."
5647	CRCM	Ranidae	Rana	pipiens	Bonner	Clark Fork	561 236	5332 739	30	July	1947	G.F. Jones	pickled, Don. by Gardner Jones; #47-45
41	AMNH	Ranidae	Rana	pretiosa	Benewah	Caldier Ranger Station; +/- 3000'	561 506	5235 861					
3678	UIM	Ranidae	Rana	pretiosa	Benewah	Emerald Creek	562 583	5196 244	10	August	1956	E. Howard	adult
3711	UIM	Ranidae	Rana	pretiosa	Benewah	Marrowing Creek, 12 miles N of Harvard	525 066	5211 418	20	April	1964	R. Wallace	adult
4820	MSUM	Ranidae	Rana	pretiosa	Benewah	5 mi. SW of Emida.	524 638	5212 002	30	April	1975	Fitzner, R. E	
4305	CPS	Ranidae	Rana	pretiosa	Benewah	Hangman near Tensed	505 675	5222 449	12	September	1936	JRS	CPS database record has "R. pretiosa."
5038	MVZ	Ranidae	Rana	pretiosa	Benewah	1 MI N OF CO. LINE ON U.S. ALT. 95	509 723	5209 217	14	August	1962	WINOKUR R.M.	
3019	LACM	Ranidae	Rana	pretiosa	Bonner	2 miles E Nordman (W of Priest Lake)	506 987	5385 902	17	September	1969	D. Howell	
3020	LACM	Ranidae	Rana	pretiosa	Bonner	Priest River at Dickensheet Campground just S of Priest	507 470	5386 191	10	September	1969	D. Howell	
3021	LACM	Ranidae	Rana	pretiosa	Bonner	Kalispell Creek, 3 miles S Nordman, W Priest Lake	502 378	5382 911		September	1969	D. Howell	
3022	LACM	Ranidae	Rana	pretiosa	Bonner	Reeder Creek, 2 miles W Nordman, W Priest Lake	500 902	5386 317	16	September	1969		
3023	LACM	Ranidae	Rana	pretiosa	Bonner	Chase Lake (S. of Priest Lake)	512 789	5367 207	10	September	1969		
3044	LACM	Ranidae	Rana	pretiosa	Bonner	Reeder Creek, 2 miles W Nordman, 2700'	500 902	5386 317	8	August	1974	D. Howell	
3055	LACM	Ranidae	Rana	pretiosa	Bonner	2.5 miles W Nordman	498 357	5385 956	26	August	1976	D. Howell	
3262	UIM	Ranidae	Rana	pretiosa	Bonner	Mirror Lake	537 199	5334 462	19	August	1956	J. Waltz	adult
3264	UIM	Ranidae	Rana	pretiosa	Bonner	Mirror Lake	537 199	5334 462	19	August	1956	J. Waltz	adult
3516	UIM	Ranidae	Rana	pretiosa	Bonner	Mirror Lake	537 199	5334 462	28	June	1955	J. Waltz	ad/actual collection date is May 1958
3518	UIM	Ranidae	Rana	pretiosa	Bonner	2 miles E of Cocoin, Lamb Creek	514 429	5369 520	04	May	1964	P. Dumas	adult
3584	UIM	Ranidae	Rana	pretiosa	Bonner	Mirror Lake	537 199	5334 462	23	February	1958	P. Dumas	collection missing
3727	UIM	Ranidae	Rana	pretiosa	Bonner	7 miles NW of Priest River	552 431	4781 973	06	April	1964	R. Lee	adult
3728	UIM	Ranidae	Rana	pretiosa	Bonner	Priest River	506 849	5336 359	22	August	1966	L. Brown	adult subadult
3732	UIM	Ranidae	Rana	pretiosa	Bonner	2 miles E of Priest River	509 678	5336 230	22	April	1956	B. Barnes	adult

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RECORD NUMBER	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	UTM Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
3739	UM	Ranidae	Rana	pretiosa	Bonner	7 miles NW of Priest River	500 208	5344 807	23	August	1958	Spurgeon	adult
3746	UM	Ranidae	Rana	pretiosa	Bonner	3 miles NW of Priest River	503 479	5340 140	28	October	1953	B. Vedder	adult
3758	UM	Ranidae	Rana	pretiosa	Bonner	Priest River	506 849	5336 359	28	June	1955	B. Vedder	subadult
3960	UM	Ranidae	Rana	pretiosa	Bonner	Kaniku Marsh S of Coolin	511.777	5368 686	20	April	1990	P. Lindeman	adult
3961	UM	Ranidae	Rana	pretiosa	Bonner	Kaniku Marsh S of Coolin	511.777	5368 686	20	April	1990	F. Rabe, P. Gier, & P. Lindeman	larveecaptured in insect activity traps
4247	UMMZ	Ranidae	Rana	pretiosa	Bonner	Prest Lake Cavanaugh Bay	512 293	5374 977	24	August	1950	R PORTERAND A SCHWARTZ	
4702	USNM	Ranidae	Rana	pretiosa	Bonner	Sandpoint	533.303	5347.792	20	September	1892	Not Verified	"Nature: wet. Presence not verified." Accession #027718 for all specimens.
4703	USNM	Ranidae	Rana	pretiosa	Bonner	Sandpoint	533.303	5347.792	7	August	1893	Not Verified	"Nature: wet. Presence not verified." Accession #028136 for all specimens.
4710	USNM	Ranidae	Rana	pretiosa	Bonner	Hope, near, Lake Pend d'Oreille	551.477	5343.927	13	July	1896	Not Verified	"Nature: wet. Presence not verified." Donated by Bureau of Fisheries.
4874	CPS	Ranidae	Rana	pretiosa	Bonner	Luby Bay at Priest Lake	505.730	5375.988	9	September	1939	JRS	CPS database record has "R.p. pretiosa."
4974	MVZ	Ranidae	Rana	pretiosa	Bonner	5 MI W COCOLALLA	520.155	5327.478	28	July	1932	MILLER A H	
300	CAS	Ranidae	Rana	pretiosa	Kootenai	Sand Point	532.944	5345.832	21	August	1893	Gilbert & Jenkins	
301	CAS	Ranidae	Rana	pretiosa	Kootenai	Coeur D'Alene Lake			21	August	1893	Gilbert & Jenkins	Ext. to CAS
302	CAS	Ranidae	Rana	pretiosa	Kootenai	Coeur D'Alene Lake			24	June	1894	Gilbert & Jenkins	Ext. to CAS
332	CAS	Ranidae	Rana	pretiosa	Kootenai	Mt. Carlton			4	July	1894	J.D. Snyder	
333	CAS	Ranidae	Rana	pretiosa	Kootenai	Mt. Carlton			2	July	1894	J.D. Snyder	
334	CAS	Ranidae	Rana	pretiosa	Kootenai	Mt. Carlton			26	July	1894	J.D. Snyder	
481	CAS	Ranidae	Rana	pretiosa	Kootenai	Coeur d'Alene Lake						Gilbert & Jenkins	Lost in the earthquake and fire of 1906.
482	CAS	Ranidae	Rana	pretiosa	Kootenai	Coeur d'Alene Lake			14	August	1949	Gilbert & Jenkins	Lost in the earthquake and fire of 1906.
3724	UM	Ranidae	Rana	pretiosa	Kootenai	Fernan Lake	520 708	5280 143	10	August	1950	anonymous	adult
4704	USNM	Ranidae	Rana	pretiosa	Kootenai	Coeur d'Alene Lake	515.745	5270.761	21	August	1893	Not Verified	"Nature: wet. Presence not verified." Accession #028136 for both specimens
3185	UM	Ranidae	Rana	pretiosa	Shoshone	10 miles SE of Avery	603.623	5218.885	23	August	1958	J. Walitz	adult
3266	UM	Ranidae	Rana	pretiosa	Shoshone	Dismal Lake, 10 miles SE of Avery	603.623	5218.885	26	May	1962	J. Walitz	adult
3422	UM	Ranidae	Rana	pretiosa	Shoshone	Dismal Lake, 10 mi. SE of Avery	482.875	4916.127	08	April	1966	P. Dumas	collection missing
3574	UM	Ranidae	Rana	pretiosa	Shoshone	23 miles E of St. Maries, St. Joe River	557.527	5235.661	04	June	1956	P. Dumas	adult
3589	UM	Ranidae	Rana	pretiosa	Shoshone	10 miles SE of Avery, Dismal Lake	501.308	5318.107	08	April	1962	P. Dumas	adult
3626	UM	Ranidae	Rana	pretiosa	Shoshone	10 miles SE of Avery, Dismal Lake	603.623	5218.885	07	May	1955	P. Dumas	adult
3690	UM	Ranidae	Rana	pretiosa	Shoshone	23 mi. E of St. Maries, along St. Joe River	502.983	5196.244	28	October	1953	Garrett	collection missing
3605	UM	Ranidae	Rana	pretiosa	Shoshone	23 miles E of St. Maries	557.527	5235.661	04	May	1955	N. Garrett	subadult

Table 2a. Amphibian museum records for Benewah, Borner, Kootenai, and Shoshone counties, Idaho (Northern Intermountain Herpetological Database).

RECORD NUMBER	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	UTM Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
4713	USNM	Ranidae	Rana	pretiosa	Shoshone	Thompson Pass			5	August		Bailey, V.	"Natura: vert. Presencia not verified" Accession #052687. Year of Collection not given; collector questionable. Donated by Biological Survey.
4976	MVZ	Ranidae	Rana	pretiosa	Shoshone	GLIDDEN LAKES			24	July	1932	MILLER A.H.	
4977	MVZ	Ranidae	Rana	pretiosa	Shoshone	GLIDDEN LAKES			24	July	1932	MILLER A.H.	
4982	MVZ	Ranidae	Rana	pretiosa	Shoshone	GLIDDEN LAKES			24	July	1932	ORR R.T.	
4987	MVZ	Ranidae	Rana	pretiosa	Shoshone	GLIDDEN LAKES			23	July	1932	ORR R.T.	
4998	MVZ	Ranidae	Rana	pretiosa	Shoshone	GLIDDEN LAKES			24	July	1932	ORR R.T.	
5646	CRCM	Ranidae	Rana	pretiosa	Borner	Warren Isl. Lake Pond Oreille	550 001	5342 656	21	July	1947	G.F. Jones	picked. Don. by Gardner Jones, #47-46
3028	LACM	Ranidae	Rana	sylvatica	Borner	Reader Creek, 2.5 miles W Nordman	500 902	5366 317	6	July	1970	D. Howell	
3031	LACM	Ranidae	Rana	sylvatica	Borner	Priest Lake	510 098	5383 208	8	July	1970	D. Howell	

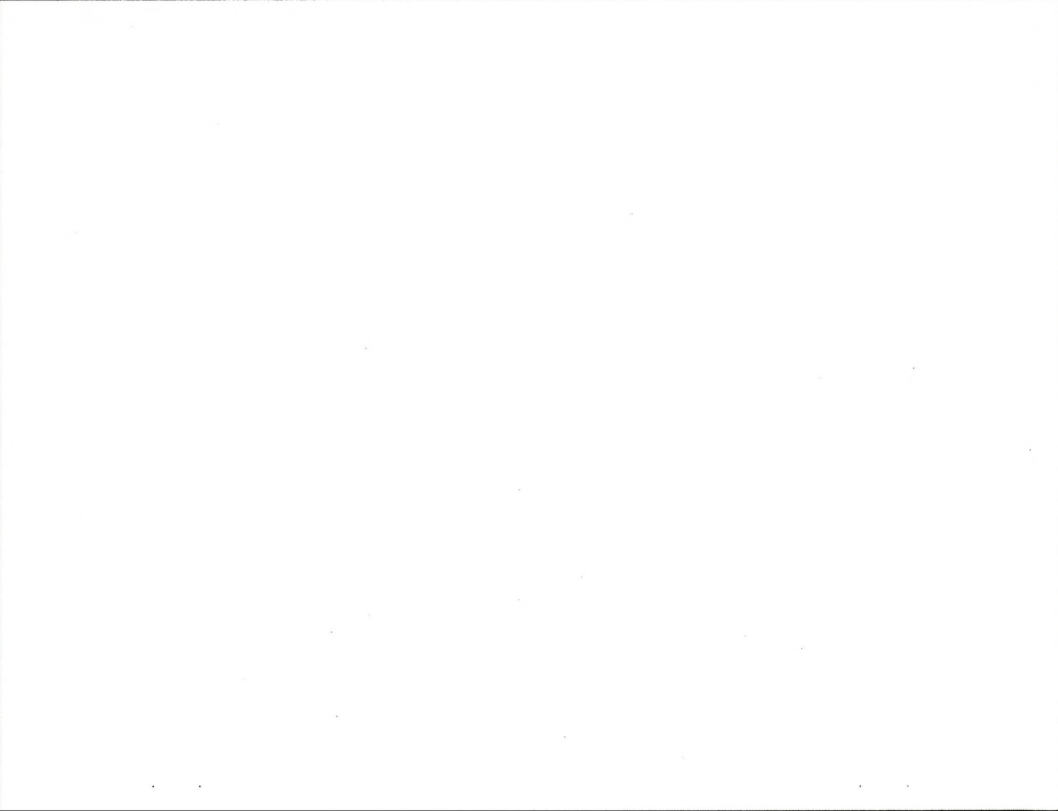


Table 2b. Reptile museum records for Benewah, Bonner, Kootenai, and Shoshone Counties, Idaho (Northern Intermountain Herpetological Database).

RECORD NUMBER	MUSEUM	CATALOG NUMBER	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	UTM Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
3050	LACM	121536	Anguillidae	Elgania	coerulea	Bonner	Upper priest lake, NE shore	508.022	5404.549	9	May	1960	D.R. Paulson	
3699	UIM	355	Anguillidae	Gerrhonotus	coeruleus	Kootenai	1 mile W of Carlin Bay, Lake Coeur d'Alene	517.136	4903.794	24	July	1963	G. Johnson	adult
5644	CRCM	48	Anguillidae	Gerrhonotus	coeruleus	Bonner	Warren Isl. Lake Pend Oreille	550.001	5342.656	21	July	1947	G.F. Jones	pickled. Don by Gardner Jones, #47-19
5645	CRCM	48	Anguillidae	Gerrhonotus	coeruleus	Bonner	Warren Isl. Lake Pend Oreille	550.001	5342.656	21	July	1947	G.F. Jones	pickled. Don by Gardner Jones, #47-28
2513	IMNH	713	Boidae	Charina	bottae	Benewah	3 miles from Beauty Bay on AL 56 toward St. Maries	519.880	5273.061	25	April	1962		
3286	UIM	100	Boidae	Charina	bottae	Benewah	Hayburn Park Campground-Benewah Lake	523.720	5243.911	18	July	1969	Musser	adult
3674	UIM	341	Boidae	Charina	bottae	Benewah	on S side of Chalcolet Lake	519.673	5244.167	26	June	1966	D. Gayman	juvenile;
3440	UIM	201	Boidae	Charina	bottae	Bonner	near Priest River	506.849	5336.359	09	July	1966	W. Dailey	adult
4769	USNM	40121	Boidae	Charina	bottae	Bonner	Hope, on Pend d'Oreille Lake.	551.477	5343.927	29	June	1896	Alexander, Cox (2 individuals?)	"Nature: wet. In collection." Col. #897. Donated by Bureau of Fisheries.
4861	CPS	6359	Boidae	Charina	bottae	Bonner	East Sand Point	533.936	5346.612	5	June	1955	MLJ	CPS database record has "C. bottae."
4882	CPS	6360	Boidae	Charina	bottae	Bonner	Emmie	539.820	5369.055	18	June	1955	MLJ	CPS database record has "C. bottae."
5319	MVZ	15287	Boidae	Charina	bottae	Bonner	5 MI W COCCLALLA	520.155	5327.474	1	August	1932	DRR R.T.	
461	CAS	2955	Boidae	Charina	bottae	Kootenai	Hoosoo Valley.			14	August	1895	J.D. Snyder	41 scale rows. See 4188 (tag lost, new # given). Only # 2955-now # 4188
462	CAS	2956	Boidae	Charina	bottae	Kootenai	Blue Lake.	523.773	5259.260	23	July	1895	J.D. Snyder	41 scale rows.
4821	MSUM	13419	Boidae	Charina	bottae	Kootenai	Coeur d'Alene	518.505	5281.716			1966	Stephenson, S.	
3427	UIM	194	Boidae	Charina	bottae	Shoshone	Buzzard Roost L.D.			04	August	1938	C. Engler	adult.
2509	IMNH	709	Colubridae	Coluber	constrictor	Benewah	3 miles from Beauty Bay; alt. 95 toward St. Maries	519.880	5273.061	25	April	1962		
3478	UIM	226	Colubridae	Coluber	constrictor	Kootenai	Post Falls	504.128	5284.641	01	May	1964	anonymous	adult, actual collection date is May 1964
4472	USNM	44262	Colubridae	Coluber	constrictor	Kootenai	Coeur d'Alene	518.505	5281.716	25	May	1891	Not Verified	"Nature: wet. Presence not verified." Accession #52687. Donated by adult, actual collection date is May 1964
3447	UIM	205	Colubridae	Ptychophis	melanocephalus	Kootenai	Post Falls	504.128	5284.641	01	May	1964	anonymous	adult, actual collection date is May 1964
3531	UIM	256	Colubridae	Thamnophis	elegans	Benewah	Emerald Creek	551.373	5213.301	20	June	1954	P. Dunn	juvenile.
3056	LACM	125291	Colubridae	Thamnophis	elegans	Bonner	1.5 miles W Nordman, ca. 2600'	502.128	5385.492	26	August	1976	D. Howell	
3108	MCZ	43101	Colubridae	Thamnophis	elegans	Bonner	Coolin	511.341	5369.611				none	
3525	UIM	253	Colubridae	Thamnophis	elegans	Bonner	Priest River	506.849	5336.359	30	March	1964	D. Malm	adult
3528	UIM	255	Colubridae	Thamnophis	elegans	Bonner	3 miles SE of Priest River	501.395	5161.326	23	March	1964	D. Malm	adult.
4249	UIMMZ	102503	Colubridae	Thamnophis	elegans	Bonner	3 MI N Of Clark Fork	561.104	5338.267	26	August	1950	WE DUPELLMAN	
4250	UIMMZ	102504	Colubridae	Thamnophis	elegans	Bonner	3 MI N Of Clark Fork	561.104	5338.267	26	August	1950	WE DUPELLMAN	YOUNG BORN TO 102503 SHORTLY AFTER CAPTURE
4767	USNM	21468	Colubridae	Thamnophis	elegans	Bonner	Sandpoint	533.303	5347.792	7	August	1963	Not Verified	"Nature: wet. Presence not verified." Accession #28136
4793	USNM	40090	Colubridae	Thamnophis	elegans	Bonner	Gardens Lake, near Lake Pend d'Oreille.	546.144	5341.187	9	July	1896	Not Verified	"Nature: wet. Presence not verified." Donated by Bureau of Fisheries
4794	USNM	40106	Colubridae	Thamnophis	elegans	Bonner	Hope, Lake Pend d'Oreille.	551.477	5343.927	29	June	1896	Not Verified	"Nature: wet. Presence not verified." Donated by Bureau of Fisheries.

Table 2b. Reptile museum records for Benewah, Bonner, Kootenai, and Shoshone Counties, Idaho (Northern Intermountain Herpetological Database).

RECORD NUMBER	MUSEUM	CATALOG NUMBER	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	UTM Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
4795	USNM	40110	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Bonner	Hope, near, Garners Lake, near Lake Pend d'Oreille.	546.144	5341.187	6	July	1896	Not Verified	"Nature: wet. Presence not verified." Donated by Bureau of Fisheries.
4879	CPS	10090	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Bonner	Elmira Shoshone Creek			18	June	1955	Leo Black	CPS database record has "T. e. vagrans"
5264	MVZ	181884	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Bonner	UNIVERSITY OF IDAHO WILDLIFE & RANGE SCIENCE FIELD STA., CA. 1.5 M E CLARK FORK	563.931	5332.552	30	June	1982	GOOD D.A.	
5265	MVZ	181886	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Bonner	CA. 1 MI E CLARK FORK	562.992	5332.911	30	June	1982	GOOD D.A.	
5266	MVZ	181885	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Bonner	UNIVERSITY OF IDAHO WILDLIFE & RANGE SCIENCE FIELD STA., CA. 1.5 M E CLARK FORK	563.931	5332.552	30	June	1982	GOOD D.A.	
375	CAS	2867	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	Blue Lake.	823.773	5259.296	14	July	1994	J.O. Snyder	
2514	IMNH	714	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	8 miles up Beauty Creek	525.237	5272.277	25	April	1962		
3523	UIM	252	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	Fernan Lake	520.708	5280.143	03	June	1964	anon.	adult.
3527	UIM	254	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	Post Falls	504.128	5284.641	01	May	1964	anon.	adult, actual collection date is May 1964
4807	USNM	205041	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	Coeur d'Alene, 5 mi S of US-10 on Wolf Lodge Creek Road	528.984	5277.542	15	July	1977	Bussack, Stephen D., Wsnar, Jeanne A.	"Nature: wet. Presence not in collection." Accession #328485
5274	MVZ	181895	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	4 MI W & 0.5 MI S SPADES MTN.	538.797	5292.297	29	June	1982	GOOD D.A.	
5275	MVZ	181894	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	4 MI W & 0.5 MI S SPADES MTN.	538.797	5292.297	29	June	1982	GOOD D.A.	
5276	MVZ	181896	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	4 MI W & 0.5 MI S SPADES MTN.	538.797	5292.297	29	June	1982	GOOD D.A.	
5278	MVZ	181897	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	HAYDEN LAKE; S SHARE	521.410	5288.490	29	June	1982	GOOD D.A.	
5279	MVZ	181893	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	4 MI W & 0.5 MI S SPADES MTN.	538.797	5292.297	29	June	1982	GOOD D.A.	
5280	MVZ	181889	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	4 MI W & 0.5 MI S SPADES MTN.	538.797	5292.297	29	June	1982	GOOD D.A.	
5281	MVZ	181888	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	BEAUTY CR., AT INFLOW INTO COEUR D'ALENE LAKE	524.211	5273.057	27	June	1982	GOOD D.A.	
5282	MVZ	181890	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	4 MI W & 0.5 MI S SPADES MTN.	538.797	5292.297	29	June	1982	GOOD D.A.	
5283	MVZ	181892	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	4 MI W & 0.5 MI S SPADES MTN.	538.797	5292.297	29	June	1982	GOOD D.A.	
5284	MVZ	181891	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Kootenai	4 MI W & 0.5 MI S SPADES MTN.	538.797	5292.297	29	June	1982	GOOD D.A.	
340	CAS	1658	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Shoshone	Wardner.	566.214	5264.632	18	August	1933	Dr. C. H. Gilbert	
3120	OJ	28907	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Shoshone	Clarke	556.433	5206.615		June	1957		
3121	OJ	28908	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Shoshone	Clarke	556.433	5206.615	14	June	1957		
3122	OJ	28909	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Shoshone	Clarke	556.433	5206.615		June	1957		
3535	UIM	258	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Shoshone	Buzzard Roost L.O.			04	August	1938	Engler	adult.
4881	CPS	10092	Colubridae	<i>Thamnophis</i>	<i>elegans</i>	Shoshone	Near Cathedral Peak	564.059	5310.028	24	September	1954	MLJ	CPS database record has cat. # 1092 "T. elegans"
42	AMNH	129588	Colubridae	<i>Thamnophis</i>	<i>sirtalis</i>	Benewah	Calder Ranger Station, +/- 3000'	561.508	5235.861					
4844	CPS	4079	Colubridae	<i>Thamnophis</i>	<i>sirtalis</i>	Benewah	7 mi. NW of St. Maries	523.940	5248.204	13	September	1939	JRS	CPS database record has "T. s. sirtalis"
3025	LACM	54042	Colubridae	<i>Thamnophis</i>	<i>sirtalis</i>	Bonner	2 miles W of Nordman (W of Priest lake)	500.868	5388.344	16	September	1966	O Howell	
3109	MCZ	43102	Colubridae	<i>Thamnophis</i>	<i>sirtalis</i>	Bonner	Coolin	511.341	5369.611				none	

Table 2b. Reptile museum records for Benewah, Bonner, Kootenai, and Shoshone Counties, Idaho (Northern Intermountain Herpetological Database).

RECORD NUMBER	MUSEUM	CATALOG NUMBER	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	UTM Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
3555	UIM	233	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Bonner	2 miles E of Priest River	509.678	5336.230	19	March	1964	Burns	adult;
3588	UIM	285	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Bonner	Blanchard	603.623	5218.885	03	July	1960	anonymous	juvenile;
4842	CPS	4076	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Bonner	Crook	011.365	5369.434	10	August	1939	JRS	CPS database record has "T. s. parietalis"
4843	CPS	4078	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Bonner	5 mi. NE. of Sand Point	539.912	5351.538	11	September	1939	JRS	CPS database record has "T. s. parietalis"
361	CAS	2649	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Blue Lake.	523.773	5259.290	20	July	1894	J.O. Snyder	
362	CAS	2650	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Blue Lake.	523.773	5259.290	14	July	1894	J.O. Snyder	
363	CAS	2651	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Blue Lake.	523.773	5259.290	18	July	1894	J.O. Snyder	
364	CAS	2652	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Blue Lake.	523.773	5259.290	18	July	1894	J.O. Snyder	
365	CAS	2653	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Blue Lake.	523.773	5259.290	18	July	1894	J.O. Snyder	
366	CAS	2654	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Blue Lake.	523.773	5259.290	18	July	1894	J.O. Snyder	
367	CAS	2655	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Blue Lake.	523.773	5259.290	14	July	1894	J.O. Snyder	
368	CAS	2656	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Blue Lake.	523.773	5259.290	14	July	1894	J.O. Snyder	
369	CAS	2657	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Karakus Lake, vicinity of lower end of the lake.			26	July	1894	J.O. Snyder	
370	CAS	2658	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Karakus Lake, vicinity of lower end of the lake.			26	July	1894	J.O. Snyder	
371	CAS	2659	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Vicinity Mt. Carlton.			3	July	1894	J.O. Snyder	
372	CAS	2663	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Blue Lake.	523.773	5259.290	18	July	1894	J.O. Snyder	
373	CAS	2665	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Blue Lake.	523.773	5259.290	14	July	1894	J.O. Snyder	
374	CAS	2666	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Blue Lake.	523.773	5259.290	20	July	1894	J.O. Snyder	
1899	CM	91656	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Spirit Lake	507.501	5309.484	20	July	1959		
1900	CM	91725	Colubridae	<i>Thamnophis</i>	<i>terrestris</i>	Kootenai	Spirit Lake	507.501	5309.484	20	July	1959		G.C. SCHAEFER COLLECTION
4810	USNM	260901	Colubridae	<i>Thamnophis</i>	<i>terrestris fitchii</i>	Kootenai	Coeur d'Alene Lake, NE end of, Wolf Lodge Bay.	522.733	5274.030	26	August	1966	Jacobs, Douglas B.	"Nature wet. in collection." Accession #852095. Col #DE 101 and #DE 102
3623	UIM	304	Emydidae	<i>Chrysemys</i>	<i>pacta</i>	Bonner	Mirror Lake	504.707	5196.516	01	May	1958	J. Waltz	adult; Actual collection date was May 1956, 1 adult and 1 hatching
3753	UIM	386	Emydidae	<i>Chrysemys</i>	<i>pacta</i>	Kootenai	Rainey Hill Rd., Medicine Lake			11	October	1986	P. Lindeman	adult; male; preserved 29 Oct. 1986
3836	UIM	441	Emydidae	<i>Chrysemys</i>	<i>pacta bellii</i>	Bonner	Hager Lk., NW Bonner Co., w of Priest Lake	502.204	5382.452	20	May	1989	P. Lindeman	adult; TN RW 534
4741	USNM	21474	Iguanidae	<i>Phrynosoma</i>	<i>polyrhinos</i>	Bonner	Sandpoint	533.303	5347.792	8	August	1893	Evermann, Gilbert (2 individuals?)	"Nature wet. in collection." Accession #28136. Col #58
4846	CPS	4081	Scincidae	<i>Eumeces</i>	<i>skiltonianus</i>	Bonner	4.5 mi. NW Hope	548.300	5350.003	11	September	1939	JRS	
2517	JMNH	717	Scincidae	<i>Eumeces</i>	<i>skiltonianus</i>	Kootenai	3 miles from Beauty Bay on Alt. 95	019.880	0273.061	25	April	1962		
4847	CPS	4082	Scincidae	<i>Eumeces</i>	<i>skiltonianus</i>	Kootenai	10 mi. SE of Hamson	528.516	5246.738	13	September	1939	JRS	
4848	CPS	4083	Scincidae	<i>Eumeces</i>	<i>skiltonianus</i>	Kootenai	4 mi. SW Coeur D'Alene	524.735	5276.235	12	September	1939	JRS	
5648	CRCM	48	Scincidae	<i>Eumeces</i>	<i>skiltonianus</i>	Bonner	Pack River	543.897	5356.786	19	July	1947	G.F. Jones	picked Don by Gardner Jones #47-31

Table 3. incidental observations by J.E. Janovetz and J.M. Beck.

Animal's Location - verbal description	Species	No.	Date	Observer	Habitat Description	Remarks
Moon Gulch Road - 1.2 mile N of I-90	THEL	1	7/1/94	Jeff E. Janovetz	coniferous forest	
Pine Creek - 20 m S of mile 3 overpass	THEL	1	9/04/94	Jeff E. Janovetz		
100 m S of intersection of E and W forks of Pine Creek	CHBO	1	9/04/94	Jeff E. Janovetz		Road kill
25' N of Latour Creek overpass	THEL	1	9/04/94	Jeff E. Janovetz		
0.25 mi S of Latour Cr. overpass	THEL	1	9/04/94	Jeff E. Janovetz		
In front of Page sewage plant; E of Smelterville	THEL	1	7/30/95	Jeff E. Janovetz	near sewage pond	
KOA Kampground Pinehurst Idaho	AMMA	4	5/8/96	JMB	Under logs adjacent to wetlands	
Canyon Creek - 1.8 mi N of I-90 overpass on paved road, east side of creek against canyon wall	AMMA	1	5/9/96	JMB	Under cardboard at base of young white pine	
Moon Gulch Road culvert. 1.4 miles N. of intersection of Moon Gulch roads and Silver Valley road.	PLID	1	5/9/96	JMB	under draining culvert of an east facing slope, draining into moon gulch	
Big Creek along mountain side, 0.6 miles from intersection with Rt. 90	PLID	1	5/10/96	JMB	Seep on north facing slope, Shale and gravel with pooled water at base of slope. Moss, gravel, and cottonwoods	
Big Creek along mountain side, 0.6 miles from intersection with Rt. 90	AMMA	1	5/10/96	JMB	Seep on north facing slope, shale and gravel with pooled water at base of slope. Moss, gravel, and cottonwoods	gravid
Trapper Creek road approx 200m from intersection of East fork of Pine Creek road	PLID	2	5/11/96	JMB	Talus	
North fork of Pine creek immediately after first bridge past Trapper Creek. Adjacent to borrow pit.	PLID		5/11/96	JMB		
first set of ponds west of Latour creek road	CHPI	3	5/11/96	JMB	Ponds with basking logs and lily pads	Turtles basking

Table 3. continued.

Animal's Location - verbal description	Species	No.	Date	Observer	Habitat Description	Remarks
Jack Forest Property, 75 meters SW of Pond 1. 1.2 miles from Wolf Lodge Bay exit 22 on Yellowstone Trail road. Park at gate and walk to site	PLID	1	5/12/96	JMB	large moss covered talus	very close to surface
PLID Type Locality Wolf Lodge Bay site #1. 0.4 miles from wolf lodge bay exit 22 Rt. 90	PLID	1	5/12/96	JMB	N. facing slope, talus, splash zone	found in large moss covered talus 3 m from seep
Wolf Lodge Bay site # 2. 1.1 miles from Wolf Lodge Bay exit 22 Rt. 90	PLID	1	5/12/96	JMB	Dry Talus, North facing slope	Not associated with a splash zone
Wolf Lodge Bay site # 3. 2.2 miles from Wolf Lodge Bay exit 22, Rt. 90	PLID	2	5/12/96	JMB	Talus slope with moss cover, no splash zone	Gravid female
Beauty Creek. Forest service road # 438 and Wolf Lodge Bay road intersection	PSRE	?	5/12/96	JMB	Pond created by road at inlet to Lake Coeur d' Alene	Calling Males
Jackass Creek directly above first water diversion	ASTR	1	6/20/96	JMB	Stream with 100% CC.	No ASTR found below the water diversion
Beauty Creek	ASTR	3	6/28/96	JMB	Stream with 100 CC	USFS Land
Rock outcrop along Varnum Creek. Dripping water over moss	PLID	2	6/28/96	JMB	Rock outcrop with exposed talus. Moss covered	USFS Land
Varnum creek below rock out crop	ASTR	1	6/28/96	JMB	Stream with 100 CC	USFS Land
Lost Man Creek NW site of Varnum creek canyon, trib. to Varnum Creek.	PLID	1	6/28/96	JMB	High gradient rocky stream with water cascading down .	Adult PLID was found crawling in and among the rocks and water

ASTR=Tailed Frog, THEL=WEstern Terrestrial Garter Snake, AMMA=Long-toed Salamander, RAPR= Spotted Frog, THSI=Common Garter Snake, AMTI=Tiger Salamander, PLID=Coeur D' Alene Salamander, BUBO=Western Toad, DIAT=Idaho Giant Salamander, CHPI=painted Turtle, PSRE=Pacific Treefrog.

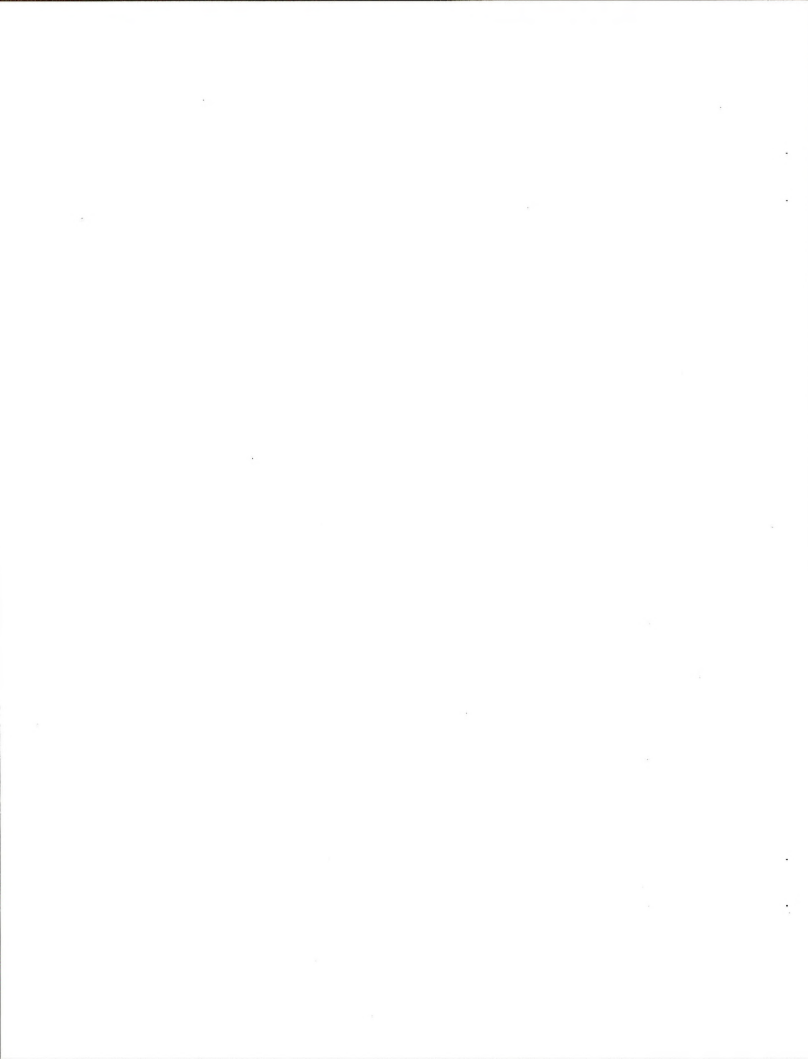


Table 4. List of potential long-term amphibian monitoring sites in the Coeur d' Alene Basin.

Site no.	Name	Species found 1994/95	Species found in 1996	COUNTY	T	R	Alliquot	UTM EASTING km	UTM NORTHING km
1	Placer Creek (stream)	ASTR	ASTR tads	Shoshone	T47N	R4E	NE SW sec. 3	580.22697	5255.961
4	Canyon Creek (stream)	none	none	Shoshone	T48N	R4E	SE SE sec. 13	584.359	5261.202
8	Polaris Creek (stream)	ASTR	ASTR	Shoshone	T48N	R3E	SE NE sec. 15	571.427	5262.200
13	Gold Run Ponds (pond)	RAPR, AMTI 7, THEL	RAPR, AMMA, PLID	Shoshone	T48N	R3E	SE SW sec. 3	570.526	5264.459
15	Airport Pond (pond)	none	AMMA eggs, BUBO tad	Shoshone	T49N	R2E	NE SW sec. 34	561.779	5266.242
20	Dry Gulch (stream)	none	ASTR, DIAT	Shoshone	T48N	R2E	SE SE sec. 34	561.528	5256.171
30	Jack Forest Pond 1 (pond)	NA	AMMA, PSRE	Kootenai	T49N	R2 W	NW NW sec. 6	525.920	5272.469
33	Loff's Bay (pond)	NA	AMMA, PSRE, BUBO	Kootenai	T49N	R4 W	NW NW sec. 35	512.964	5266.535
36	Gamlin Lake (pond)	NA	RACA, THEL	Bonner	T56N	R1E	Sec. 6;7	545.530	5341.092
37	Antelope Lake (pond)	NA	RAPR, THEL	Bonner	T55N	R2E	NW NW sec. 12	562.925	5331.435

ASTR=Tailed Frog, THEL=Western Terrestrial Garter Snake, AMMA=Long-toed Salamander, RAPR= Spotted Frog, THSI=Common Garter Snake, AMTI=Tiger Salamander, PLID=Coeur D' Alene Salamander, BUBO=Western Toad, DIAT=Idaho Giant Salamander, CHPI=painted Turtle, PSRE=Pacific Treefrog.

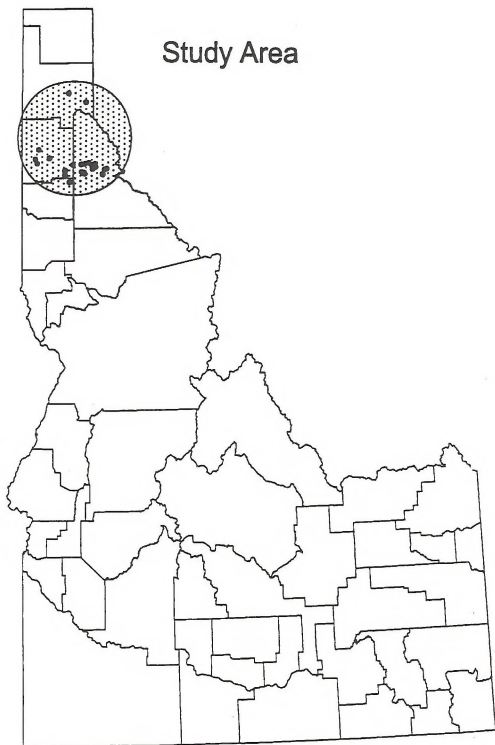
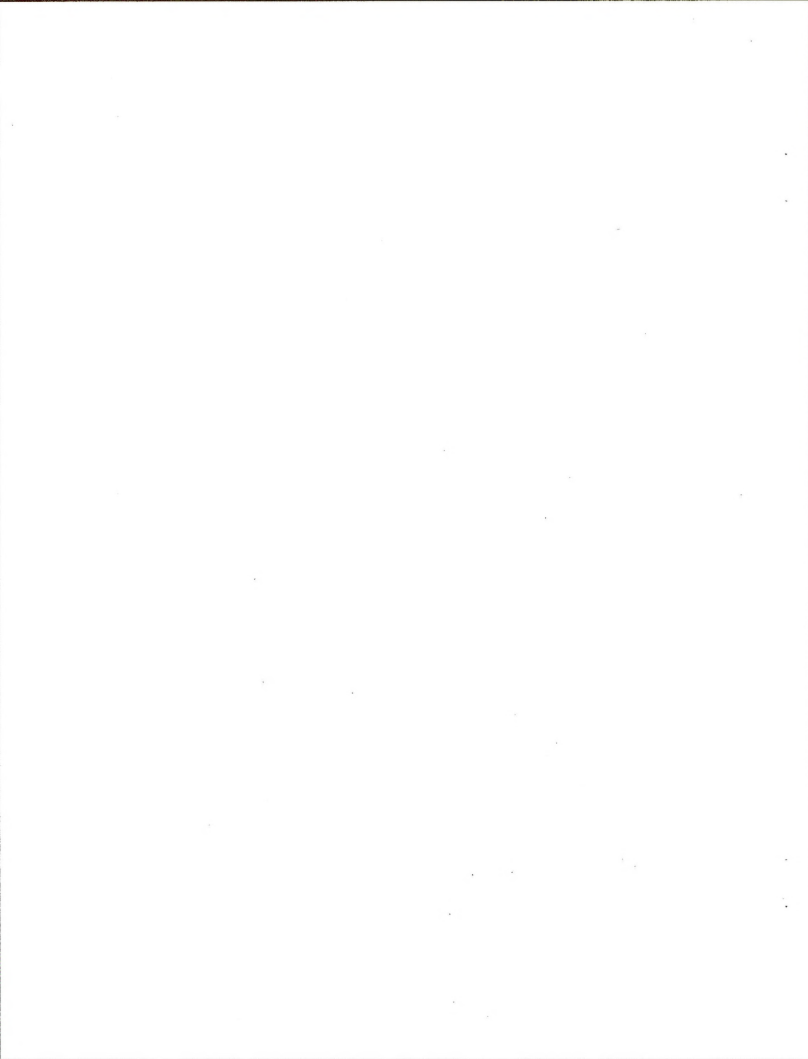


Figure 1. Study area. Solid dots indicate sampling sites.



Survey Site Locations

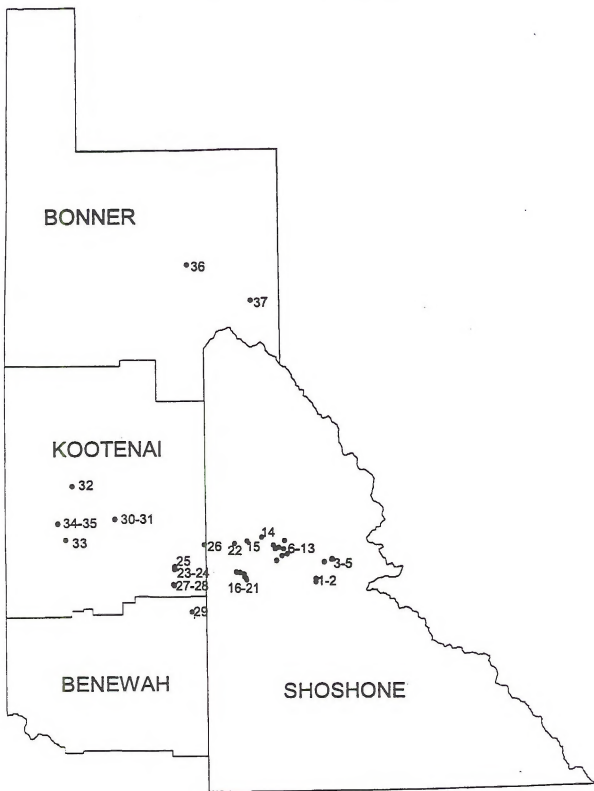


Figure 2. Survey site locations. See Table 1 for site names.

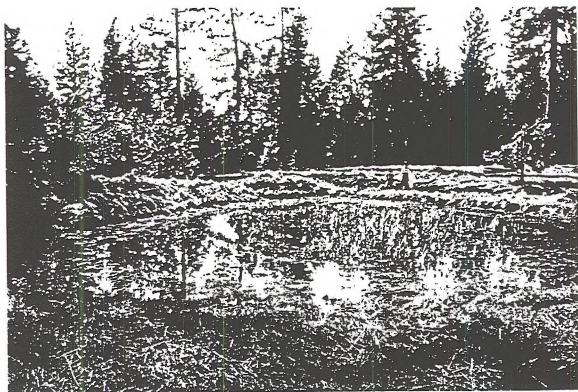


Figure 3. Jack forest Pond 1, site # 30. Photo taken from the east side of the pond looking west toward the road. 12 May 1996. (Long-toed Salamander and Pacific Treefrog)



Figure 4. Gene Day Park, site # 6. Photo taken from the southwest side of the pond (parking lot side) looking northwest. 8 May 1996. (Spotted Frog, Long-toed Salamander, and Common Garter Snake)



Figure 5. Airport Pond, site # 15. Photo taken from the east side of pond looking west toward Smeltonville. 10 May 1996. (Long-toed Salamander, and Western Toad)



Figure 6. Gamlin Lake, site # 36. Photo taken from the southern most point looking north across the bay. 17 September 1996. (Bullfrog)

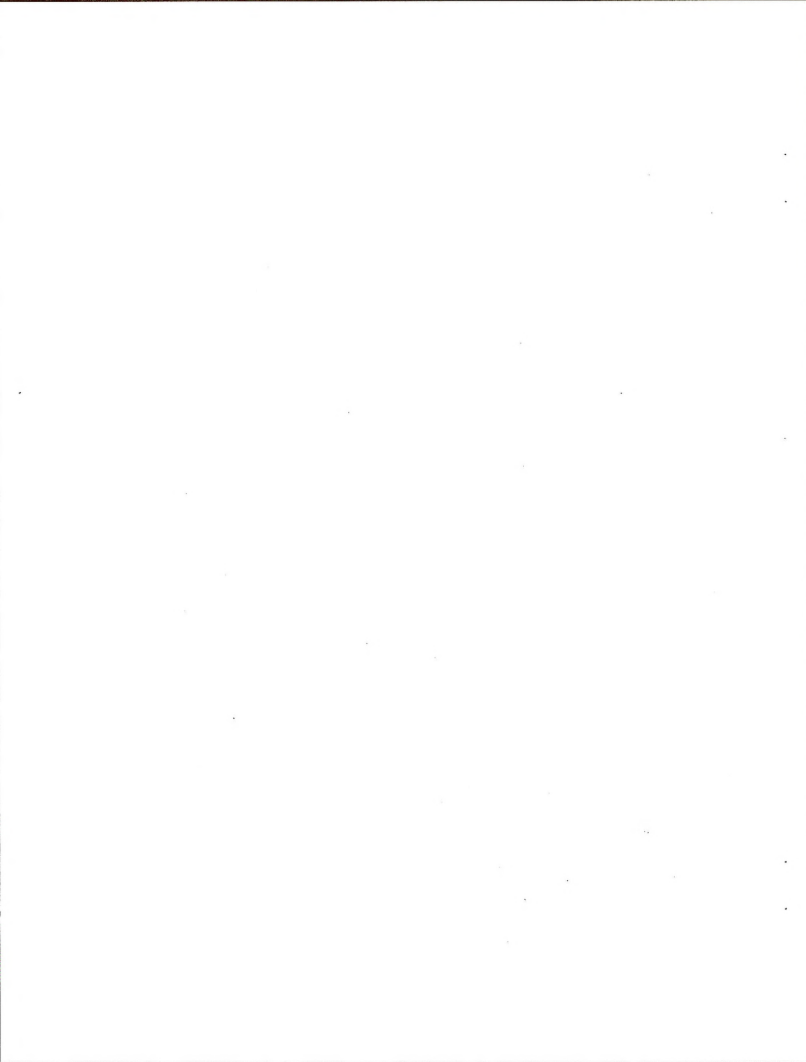




Figure 7. Placer Creek, site # 1. Photo taken from the beginning of the transect looking north. 8 May 1996. (Tailed Frog)

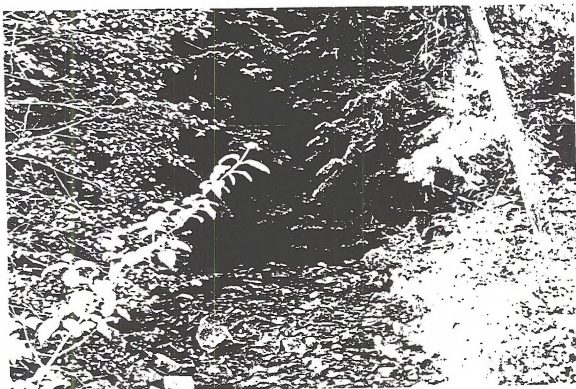


Figure 8. Lost Girl Creek, site # 28. Photo taken from Rochat Divide Road looking southwest. 26 June 1996. (Tailed Frog)

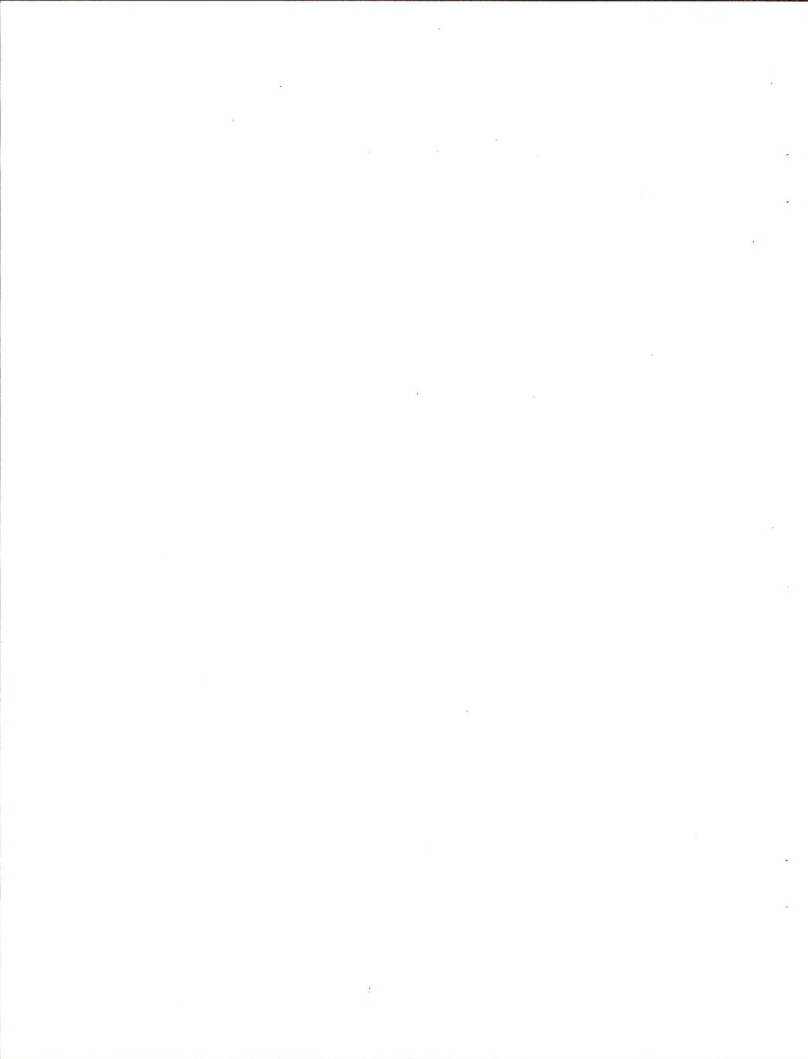




Figure 9. (above) Canyon Creek, site # 4. Photo taken from the beginning of the transect looking north. 8 May 1996. (No amphibians observed)

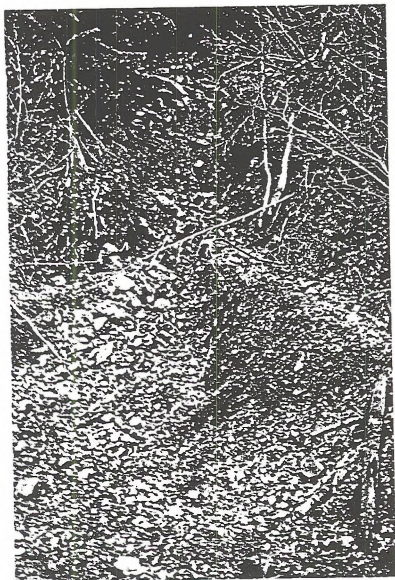
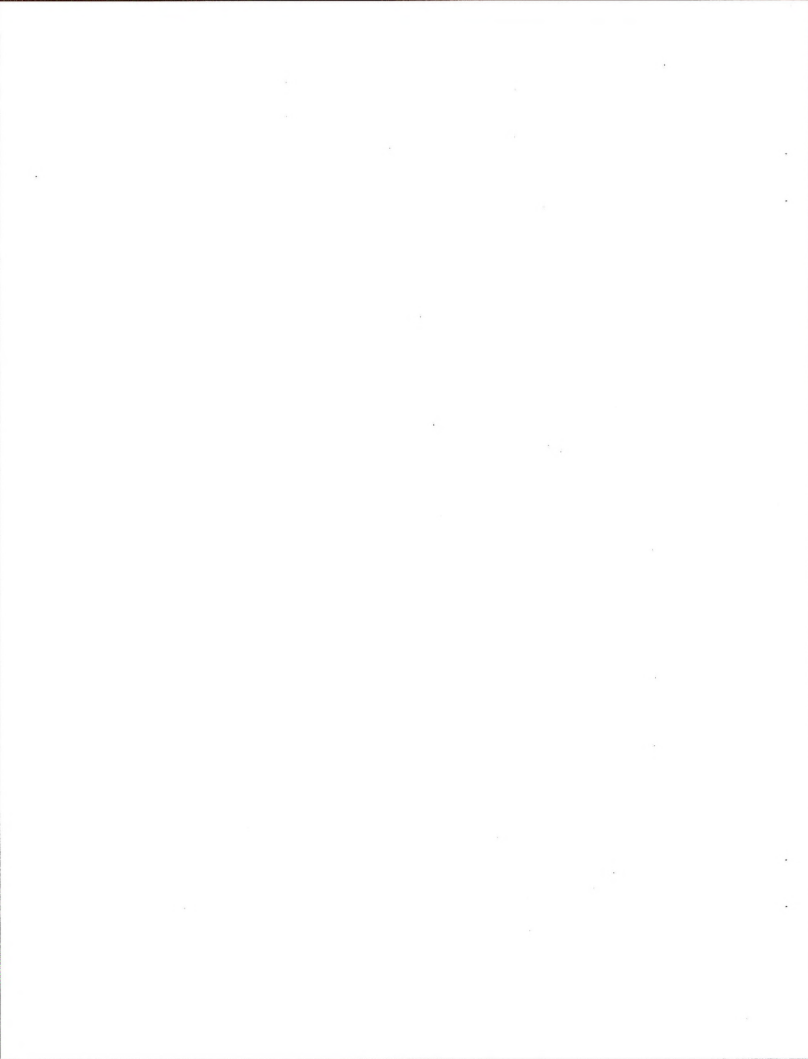
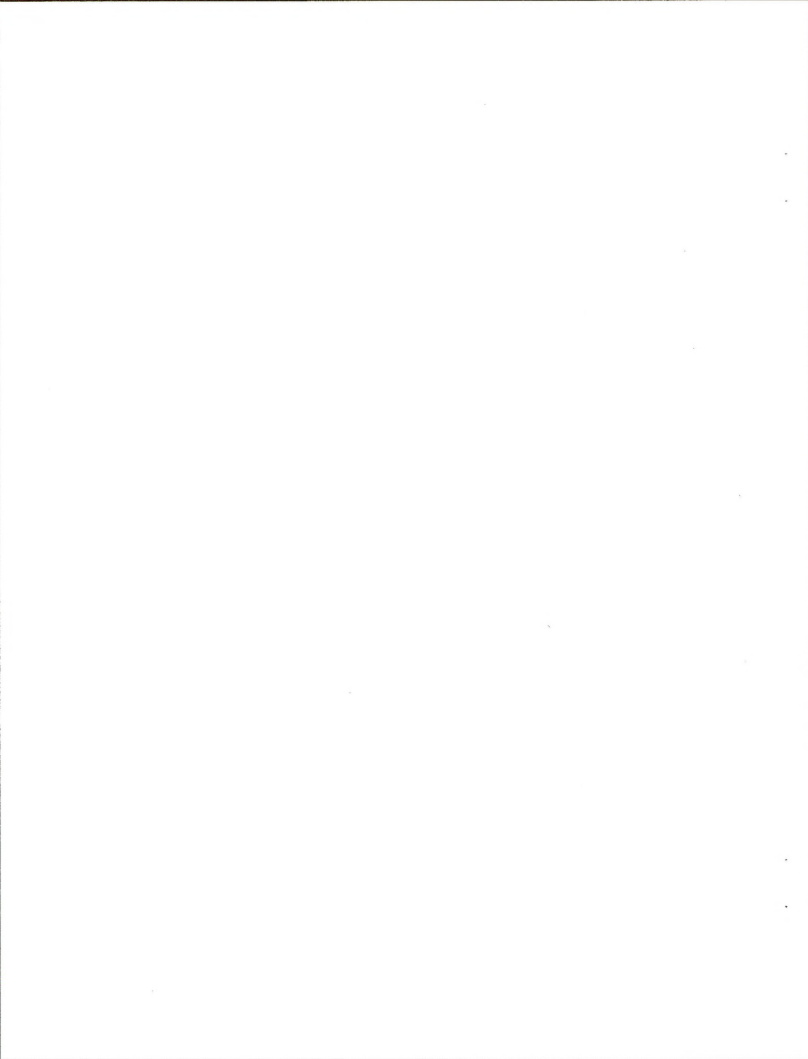


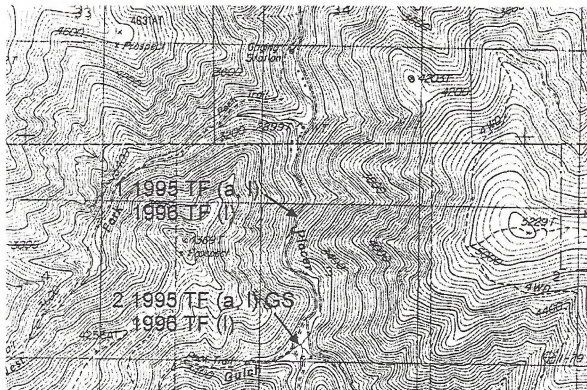
Figure 10. Wolf Lodge Bay incidental site. Photo taken from turn-out across from the first spring. Photo looking North. 18 June 1996. (Coeur d'Alene Salamander)



Site No.	Site Name	Location	Type	Species Breeding	Remarks
1	Placer Creek	Placer Creek 1.35 mi from intersection with King Street, Wallace.	stream	Tailed Frogs	High water, only searched edges of stream. Second visit water lower, searched entire stream.
2	Cranky Gulch	Cranky Gulch - fork of C.Glch. trail #39 and St. Joe trail#3 OR 2 miles from intersection with King Street, Wallace.	stream	Tailed Frogs	Recently flooded, ASTR possibly washed out of stream? Second visit found ASTR.



Wallace, Idaho Central



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

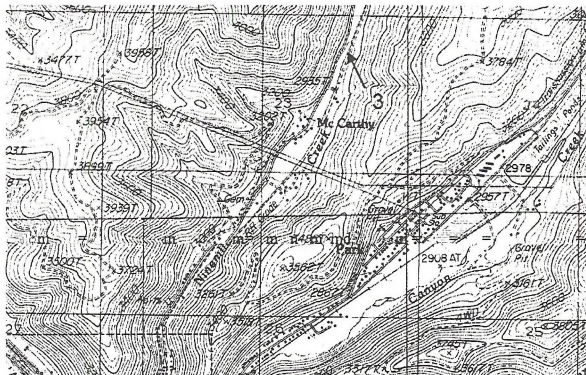
1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 11. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Wallace Idaho Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
3	Nine Mile creek	9 Mile Creek - 1.9 mi N of I-90 overpass on Nine Mile Creek Road.	stream		Site highly disturbed. Entire area reclaimed, pools added, channel altered, few aquatic insects.

Wallace, Idaho Northeast



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 12. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Wallace Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
4	Canyon Creek	Canyon Creek - 1.8 mi N of I-90 overpass on paved road.	stream		Site highly disturbed. Entire area reclaimed, pools added, channel altered, few aquatic insects.
5	Canyon Creek Seep	Canyon Creek - 1.8 mi N of I-90 overpass on paved road, east side of creek against canyon wall.	pond	Long-toed Salamanders	2" deep, area used as ATV trails, Adult AMMA located 100 m south of breeding pond/ Entire area dry at second visit. Presume no AMMA metamorphosed.

Osburn, Idaho

Southeast Corner

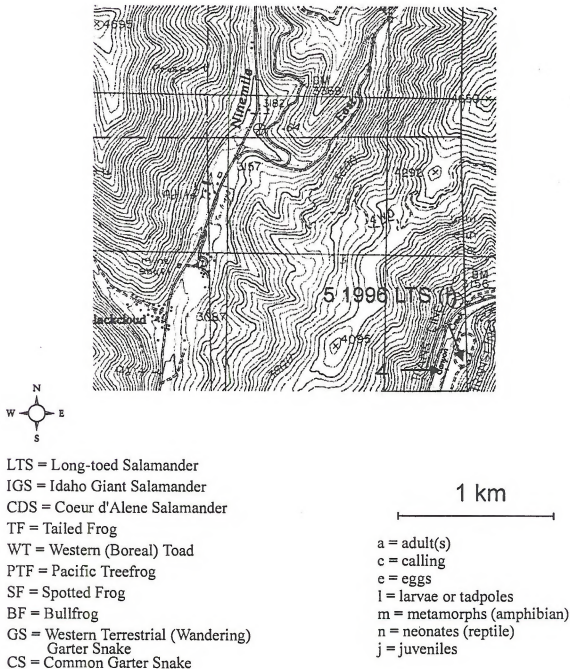


Figure 13. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Osburn Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
6	Gene Day Park	Gene Day Park - 1.7 mi W of Osburn on Warm Mullan Road.	pond	Long-toed Salamanders, Spotted Frogs	9 RAPR adults; 4 RAPR juveniles; lads; 1 AMMA adult (gravid), observed THSI eating RAPR adult.

Kellogg East, Idaho Southeast



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

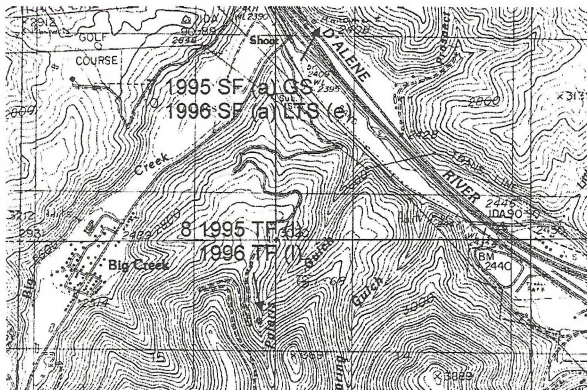
1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 14. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg East Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
7	Memorial Pond	Pond at turnoff to Elk Creek.	pond	Long-toed Salamanders	
8	Polaris Creek	Polaris Creek - 1.6 mi S of I-90, 1.5 mi S along improved road; hike 75 m to creek.	stream	Tailed Frogs	I found that slowly walking up stream and looking more effective than rock turning.

Kellogg East, Idaho South Central



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

1 km

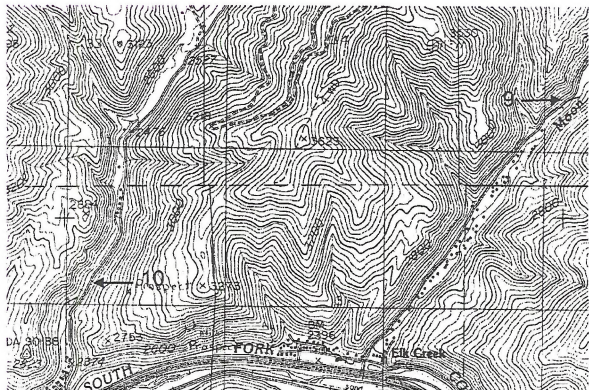


a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 15. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg East Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
9	Moon Gulch	Moon Gulch - 1.4 mi N on Moon Gulch Road.	stream		Recently flooded, high water.
10	Montgomery Creek	Montgomery Creek - 0.7 mi N of I-90	stream		

Kellogg East, Idaho Central



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

1 km

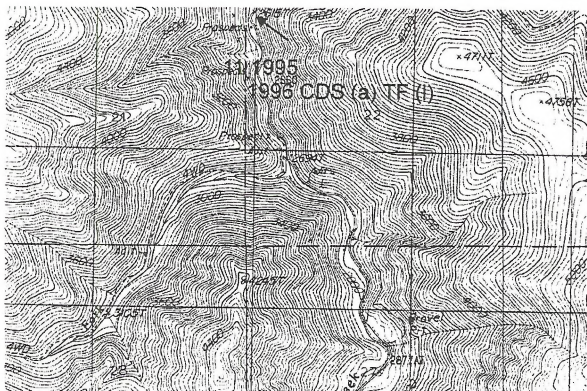


a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 16. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg East Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
11	Big Creek	Big Creek - 25 m from I-90.	stream	Tailed Frogs	Found PLID in talus slope approx. 50 m north of stream site. 5 m north foot bridge w. slope.

Polaris Peak, Idaho North Central



- LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

1 km

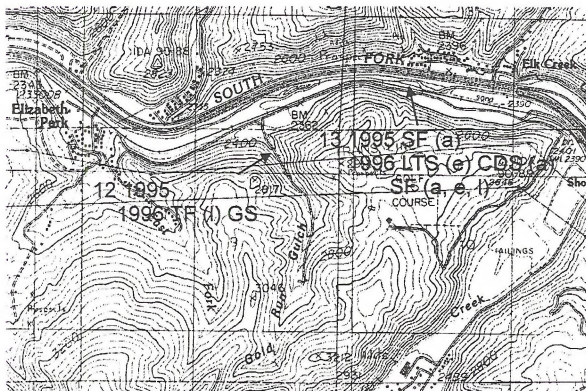


- a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 17. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Polaris Peak Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
12	Gold Run Gulch	Gold Run Gulch - .2 mi S on Gold Run Road.	stream	Tailed Frogs	Recently flooded, high water.
13	Gold Run Ponds	Series of ponds - 0.8 mi E of Gold Run Road-North of Road.	pond	Long-toed salamanders	No pond breeding amphibians south site of road. Second trip found AMMA hatched eggs but no AMMA; PLID found in talus surrounded by aspen on the west edge of pond.

Kellogg East, Idaho South Central



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

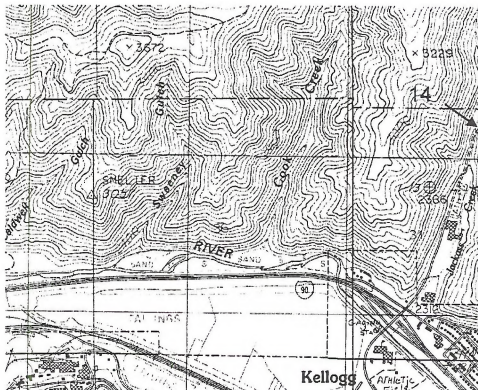
1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 18. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg East Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
14	Jackass Creek	Jackass Creek - 0.75 mi N of I-90, North of high school.	stream	see remarks	Site begins once clear of high school property. Found one ASTR tad upstream from sampling area. ASTR was immediately up-stream from collecting pool for municipal water supply.

Kellogg West, Idaho East Central



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

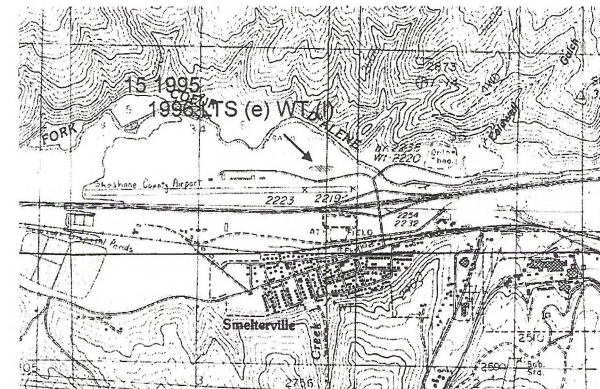
1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 19. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg West Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
15	Airport Pond	Smeltonville Airport Road.	pond	Long-toed Salamanders and Western Toads	Found one BUBO tad swimming across pond.

Kellogg West, Idaho South Central



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

1 km

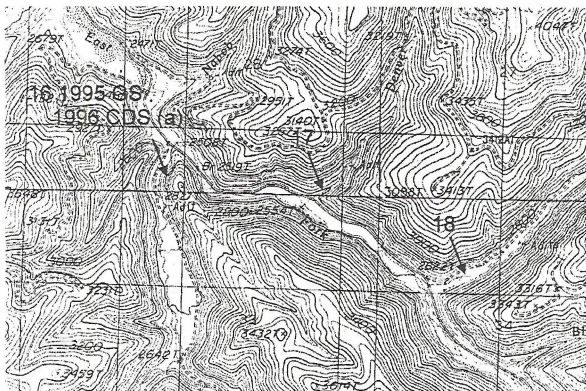


a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 20. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg West Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
16	Trapper Creek	Trapper Creek - 1 mi S of Pine Creek Rd. on Trapper Cr. Road.	stream	see remarks	Found PLID in trapper creek canyon. Did not survey trapper creek because 1995 site was on private property.
17	Denver Creek	Denver Creek - at intersection with Route 3D.	stream		Dry in 1996.
18	Highland Creek	Highland Creek - 0.4 mi NE of Route 3D.	stream		

Masonia, Idaho North Central



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

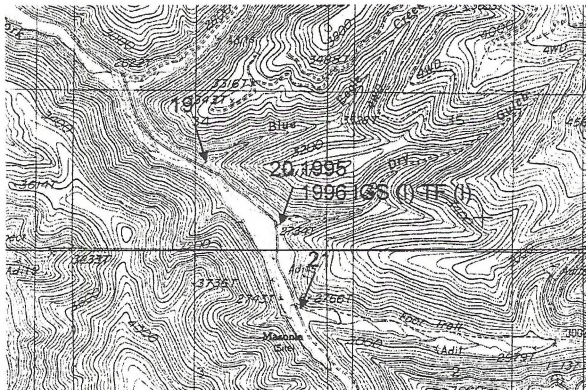
1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 21. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Masonia Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
19	Blue Eagle Creek	Big Eagle Creek - at intersection with Route 3D.	stream		
20	Dry Gulch	Dry Gulch - at intersection with Route 3D.	stream	Tailed Frogs, and Idaho Giant Salamanders	Area was dry in 1995.
21	Douglas Creek	Douglas Creek - at intersection with Route 3D.	stream		Rocks very discolored with a lot of algae.

Masonia, Idaho North Central



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

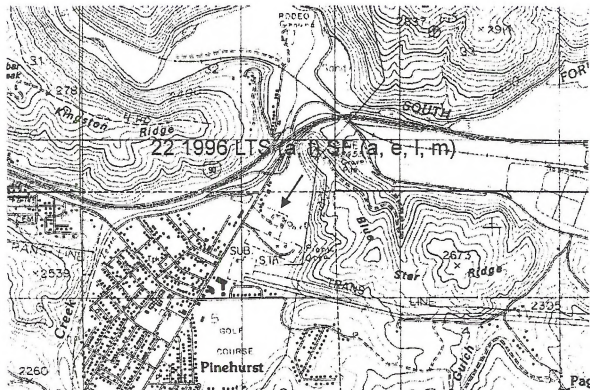
1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 22. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Masonia Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
22	KOA Kampground	Pinehurst Idaho.	pond	Long-toed Salamanders and Spotted Frogs	Man-made ponds and wetlands full of AMMA, and RAPP.

Kellogg West, Idaho Southeast



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

1 km

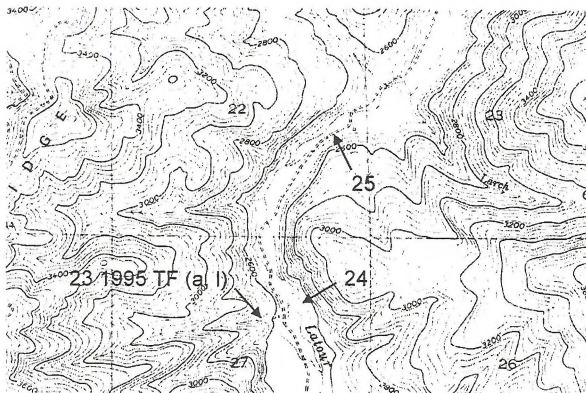
a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 23. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg West Quadrangle Idaho, 7.5 minute series (Topographic) 1985 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
23	Latour 1st Stream	1st stream - 2.15 ml from Latour Creek Overpass.	stream	Tailed Frogs	Private land. Did not sample in 1996.
24	Latour Across 1st Stream	Latour Creek - across from "1st stream".	stream		Private land. Did not sample in 1996.
25	Al's Seep	Al's seep - > 7 m S Cataldo.	seep		Private land. Did not sample in 1996.

Rochat Peak, Idaho

North Central



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

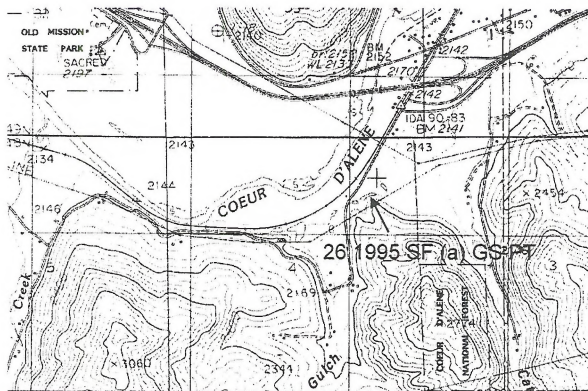
1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 24. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Rochat Peak Quadrangle Idaho, 7.5 minute series (Topographic) 1950 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
26	Ponds	Ponds - 0.6 mi S of I-90 overpass near Dudley camping park.	pond		Could not get permission to sample in 1996.

Cataldo, Idaho East Central



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 PTF = Tailed Frog
 WT = Western (Boreal) Toad
 TF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake
 PT = Painted Turtle

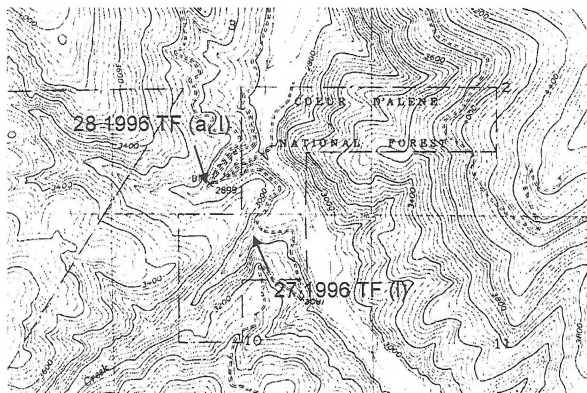
1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 25. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Cataldo Quadrangle Idaho, 7.5 minute series (Topographic) 1985 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
27	Butler Creek	Intersection of Rochat Divide Road and Butler Creek.	stream	Tailed Frogs	
28	Lost Girl Creek	Intersection of Rochat Divide Road and Lost Girl Creek.	stream	Tailed Frogs	

Rochat Peak, Idaho Center



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

1 km

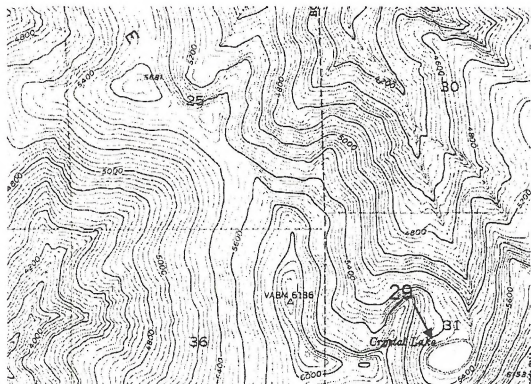


a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 26. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Rochat Peak Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
29	Crystal Lake	Crystal Lake.	pond		found one salamander larvae. I assumed AMMA and released without further inspection. Could have been AMTI used as fish bait.

Rochat Peak, Idaho Southeast Corner



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 27. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Rochat Peak Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
30	Jack Forest Pond 1	Jack Forest Property 1st pond.	pond	Long-toed Salamanders and Pacific Treefrogs	Excellent site for teaching field trips site contains many species with easy access.
31	Jack Forest Pond 2	Jack Forest Property 2nd pond adjacent to old corral.	pond	Long-toed Salamanders and Pacific Treefrogs	Excellent site for teaching field trips site contains many species with easy access.

Fernan Lake, Idaho Southeast

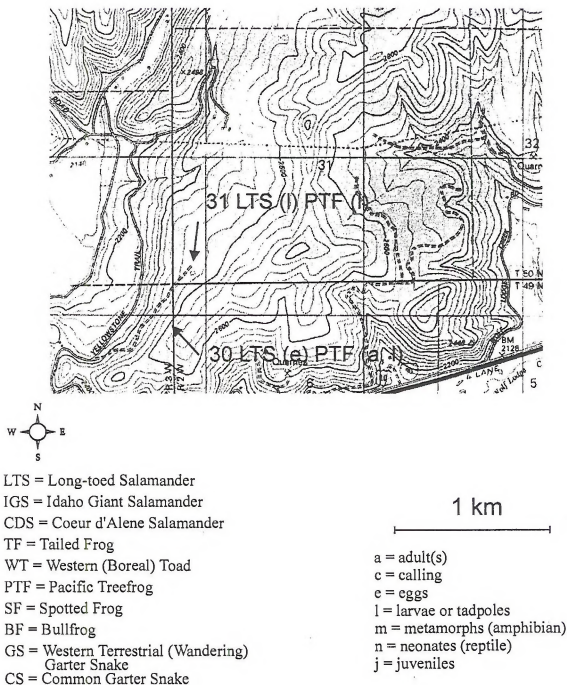
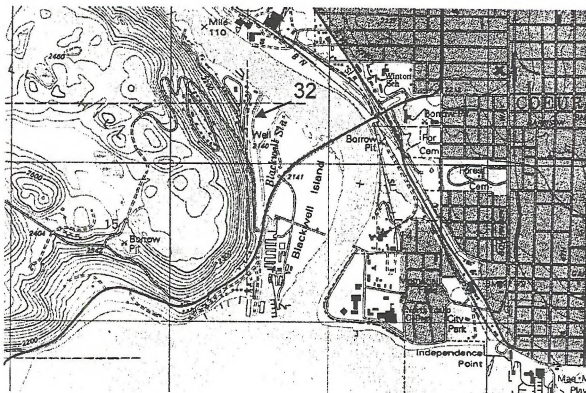


Figure 28. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Fernan Lake Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
32	Blackwell Island	Rt. 95. 0.5 mi. south of Coeur d'Alene.			Found no herps.

Coeur d'Alene, Idaho Center



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

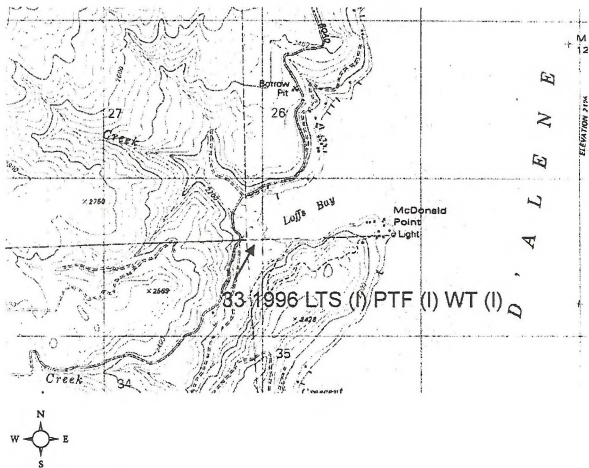
1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 29. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Coeur d'Alene Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
33	Lott's Bay	Lott's Bay, Lake Coeur d' Alene.	bay, canals, stream	Long-toed Salamanders, Western Toads, and Pacific Treefrogs	Very large area with several different habitat types: lake riparian (BUBU), series ponds and canals of canals (PSRE, RAPR and AMMA). Site has all speies except PLID (probably there).

Mica Bay, Idaho West Central



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

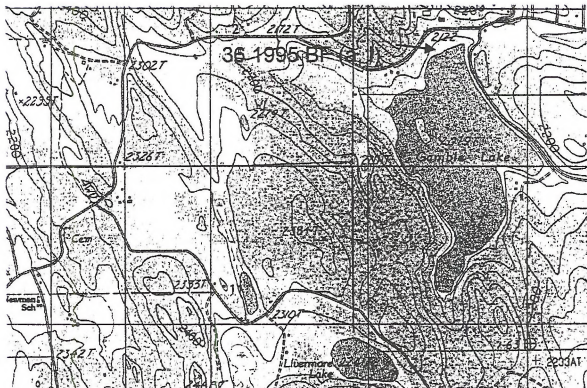
1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 30. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Mica Bay Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
34	Mica Bay	Mica Bay, Lake Coeur d' Alene.	bay		All R APR were found in mowed grass along the edge of Mica bay. area is developed as a campground with boat docks.
35	Mica Bay Creek	Creek, bisecting BLM property.	stream		Adult AMMA was observed swimming across a one meter wide pool in "Mica Bay Creek".

Talache, Idaho Northeast Corner



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

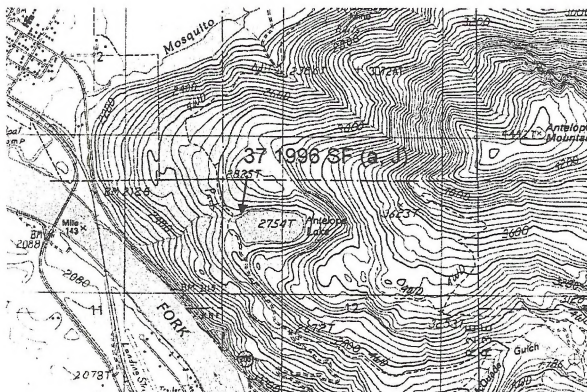
1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 32. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Talache Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
36	Gamlin Lake	Gamlin Lake, Glengary Road south of Sandpoint adjacent to Lake Pend Oreille.	pond	Bullfrogs	Lake is filled with RACA adults and tads. RACA presence is probably reason for no other amphibian species.

Clark Fork, Idaho Southeast Corner



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d' Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 TF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

1 km

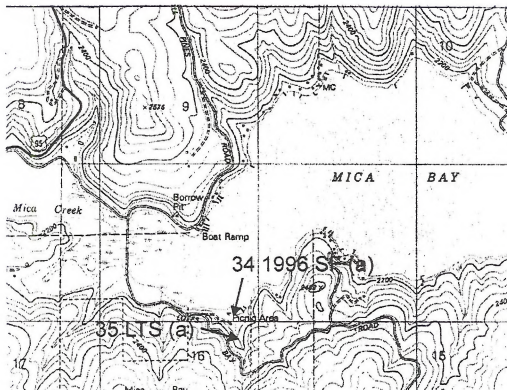


a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 33. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Clark Fork Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
37	Antelope Lake	Antelope Lake, 2 km southeast of Clark Fork.	pond		Fish present. I also found adult RAPR and RAPR juveniles.

Mica Bay, Idaho Northwest



LTS = Long-toed Salamander
 IGS = Idaho Giant Salamander
 CDS = Coeur d'Alene Salamander
 TF = Tailed Frog
 WT = Western (Boreal) Toad
 PTF = Pacific Treefrog
 SF = Spotted Frog
 BF = Bullfrog
 GS = Western Terrestrial (Wandering)
 Garter Snake
 CS = Common Garter Snake

1 km

a = adult(s)
 c = calling
 e = eggs
 l = larvae or tadpoles
 m = metamorphs (amphibian)
 n = neonates (reptile)
 j = juveniles

Figure 31. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Mica Bay Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Appendix 1. Site characteristics not included in Table 1.

Site no.	Name	Species found 94/95	Species found in 1996	Map Name	OWNER	FISH?	pH	Cond.	Water Temp.	Type	STAGES	Number Observed	Hydrologic Unit
1	Placer Creek	ASTR	ASTR	Wallace Idaho	BLM	yes	9	50	6	stream	tads 2nd year	1	17010302016
2	Cranky Gulch	THEL, ASTR	ASTR	Wallace Idaho	BLM	none seen	8.6	40	5	stream	tads 1st and second year	1,4	17010302
3	Nine Mile creek	none	none	Wallace Idaho	BLM	none seen	8.2	80	7	stream			17010302016
4	Canyon Creek	none	none	Wallace Idaho	BLM	none seen	8.4	50	4	stream			17010302015
5	Canyon Creek Seep	NA	AMMA	Wallace Idaho	BLM	no	8.7	50	13	pond	eggs; larvae	< 500	17010302
6	Gene Day Park	RAPR, AMMA, THEL	RAPR, AMMA, THEL, THSI	Kellog East	City	none seen	7.7	90	5	pond	tads, adults		
7	Memorial Pond	RAPR, THEL	RAPR, AMMA	Kellog East		none seen	8.2	170	10	pond	RAPR adults, AMMA eggs		
8	Polaris Creek	ASTR	ASTR	Kellog East	BLM	none seen	8.2	90	5	stream	1st year, 2nd year 9,3		17010302
9	Moon Gulch	none	none	Kellog East	private?	none seen	8.4	60	7	stream			17010302
10	Montgomery Creek	none	none	Kellog East		yes	8.4	40	7	stream			17010302
11	Blg Creek	none	PLID, ASTR	Polaris Peak	BLM	yes	8.4	30	5	stream	adult PLID, ASTR tads, 1st, 2nd, 3rd	1 PLID, 6 ASTR	17010302012
12	Gold Run Gulch	ASTR, THEL	none	Kellog East	BLM	none seen	8.4	60	8	stream			17010302
13	Gold Run Ponds	RAPR, AMTI ?, THEL	RAPR, AMMA, PLID	Kellog East	?	yes	7.5	130	17	pond	RAPR Adults; AMMA eggs	10,2	
14	Jackass Creek	none	ASTR- See Comments	Kellog West	BLM	none seen	8.2	40	8	stream			17010302
15	Airport Pond	none	AMMA BUBO	Kellogg West	?	yes	7.8	120	13	pond	AMMA eggs, BUBO tads	1 mass	
16	Trapper Creek	THEL	PLID	Masonia, Idaho	?	none seen	7.7	20	12	stream			17010302
17	Denver Creek	none dry	none dry	Masonia, Idaho	BLM	none seen	dry	dry	dry	stream			17010302
18	Highland Creek	none	none	Masonia, Idaho	BLM	none seen	7.5	80	15	stream			17010302
19	Blue Eagle Creel	none	none	Masonia, Idaho	BLM	none seen				stream			17010302

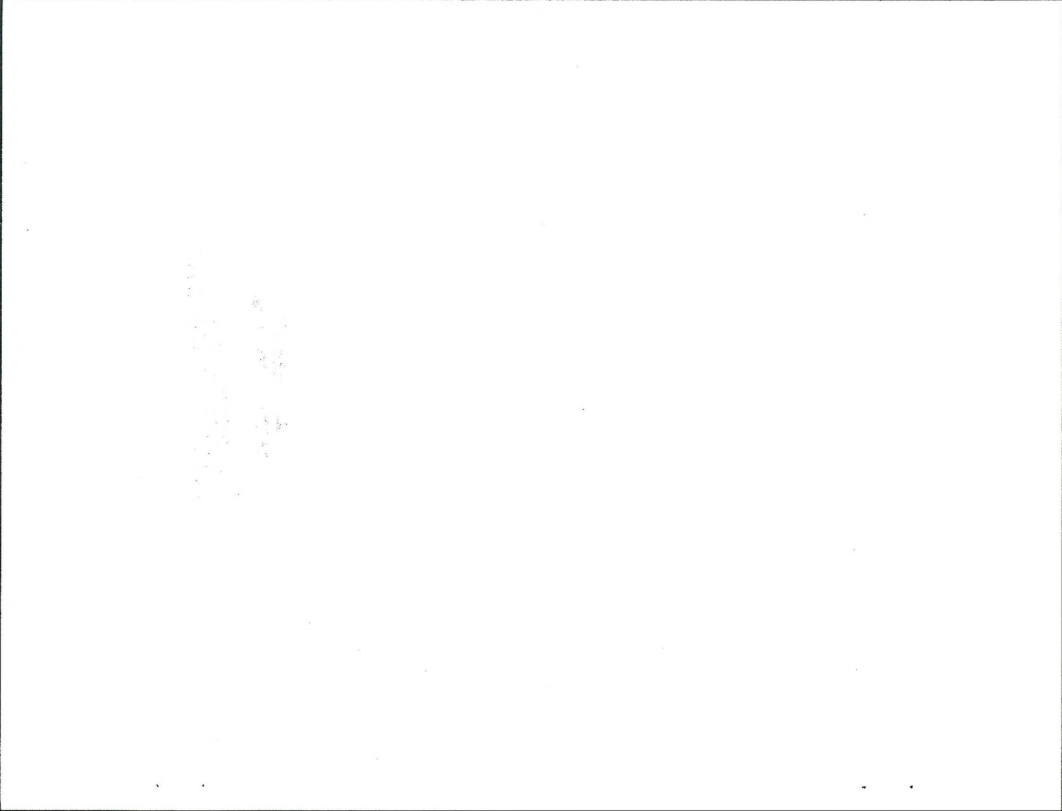
Appendix I. continued.

Site no.	Name	Species found 94/95	Species found in 1996	Map Name	OWNER	FISH?	pH	Cond.	Water Temp.	Type	STAGES	Number	Hydrologic Unit
20	Dry Gulch	none	ASTR, DIAT	Masonia, Idaho	BLM	none seen				stream	ASTR 2nd year, DIAT larvae	1,1	17010302
21	Douglas Creek	none	none	Masonia, Idaho	BLM	yes	7.8	20	13	stream			17010302
22	KOA Kempground		AMMA, RAPR	Kellog West, Idaho	Private	no				pond			
23	Lalour 1st Stream	ASTR	not sampled in 1996	Rochat Peak	Private	na	8.1	30	10.5	stream	NA	NA	17010303
24	Latour Across 1st Stream		not sampled in 1996	Rochat Peak	Private	na	8.2	10	15	stream	NA	NA	17010303
25	Ai's Seep	PLID	not sampled in 1996	Rochat Peak	Private	na				seep	NA	NA	
26	Ponds	RAPR, CHPI, THEL	not sampled in 1996	Cataldo	Private	na	9.7	80	25	pond	NA	NA	
27	Butler Creek	NA	ASTR	Rochat Peak	USFS	yes	8.2	80	8	stream	1 first, 4 2nd	1 first, 4 2nd	17010303
28	Lost Girl Creek	NA	ASTR	Rochat Peak	BLM	none seen	8.3	80	7	stream	1st, 2nd, adult	2,5,1	17010303
29	Crystal Lake		AMMA ?	Rochat Peak	BLM	yes	7.2	70	18	pond	larvae	1	
30	Jack Forest Pond 1	NA	AMMA, PSRE	Fernan Lake	BLM	none seen	8.5	40	16	pond	PSRE adult, tads, AMMA eggs	1,100's	
31	Jack Forest Pond 2	NA	AMMA	Fernan Lake	BLM	none seen	8.3	50	18	pond	PSRE tads, AMMA larvae		
32	Blackwell Island	NA	none	Coeur d' Alene	BLM								
33	Loff's Bay	NA	AMMA, PSRE, BUBO	Mica Bay	Private	none seen	8	120	18	bay, canals, stream	PSRE tads, BUBO tads, AMMA larvae, RAPR adults	hundreds of alt; two RAPR adults	
34	Mica Bay	NA	RAPR,	Mica Bay	BLM	yes	7.0	120	17	bay	adults	5	

Appendix 1. continued.

Site no.	Name	Species found 94/95	Species found In 1996	Map Name	OWNER	FISH?	pH	Cond.	Water Temp.	Type	STAGES	Number	Hydrologic Unit
35	Mica Bay Creek	NA	AMMA	Mica Bay	BLM	none seen				stream	adult	1	
36	Gamlin Lake	NA	RACA, THEL	Talache	BLM	yes	7.3			pond	RACA adults, and tads.	three RACA adults, hundreds of tads	
37	Antelope Lake	NA	RAPR, THEL	Clark Fork	BLM	yes	9.0	140	18	pond			

ASTR=Tailed Frog, THEL=Western Terrestrial Garter Snake, AMMA=Long-toed Salamander, RAPR= Spotted Frog, THSI=Common Garter Snake
 AMTI=Tiger Salamander, PLID=Coeur D' Alene Salamander, BUBO=Western Toad, DIAT=Idaho Giant Salamander, CHPI=painted Turtle, PSRE=Pacific Treefrog.



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